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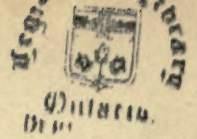

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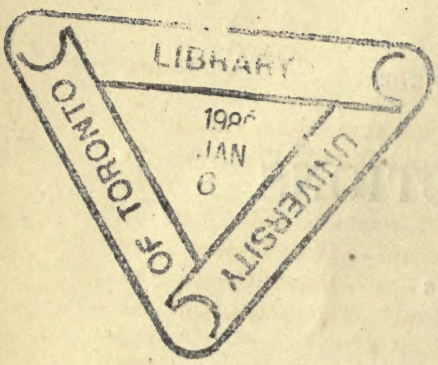

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INTRODUCTORY NOTE.

In presenting the first number of this Journal, the Committee of Publication will endeavor to explain its purpose, by explaining the work of the Association.

Social Science, or the Science of Society, treats of man as a social being. It fulfils its functions just as other sciences fulfil theirs, by collecting facts, applying principles, and reaching the general laws which govern the social relations. Its character as a Science needs not be questioned. The subjects it embraces, Education, Health, Economy and Jurisprudence, are confessedly susceptible of scientific treatment, and what is true of the parts, is equally true of the whole.

Its range is broad, too broad, we are sometimes told, to be thoroughly grasped. In minds accustomed to a specific pursuit, or fixed upon a definite object, it is apt to excite distrust. But its comprehensiveness is really an advantage. It is a safeguard against narrowness of opinion or exertion. It prevents the possibility of considering any single interest as exclusive; it discloses the connection of different lines of thought and action, and unites the branches of enquiry, instead of leaving them severed, each from the other, to the injury of all. Education, for instance, has a fairer opportunity of scientific growth, if it is studied in reference to Health; the mind and the body are both

better understood in their mutual relations. Education, Health and Economy are all surer of attaining practical results, if pursued with a regard to Jurisprudence, or the Amendment of the Laws, on which every investigation of social questions must depend, more or less, for their positive settlement. The real trouble seems to be, not that Social Science has proposed too much, but that it has accomplished too little, and the real remedy is not in narrowing, but in thoroughly cultivating the field.

At the same time the movement in this science is to be carefully distinguished from some other movements, with which it is apt to be confounded. Social Science is not Socialism. The latter deals with Society destructively, pulling down rather than building up, and reducing the higher grade to the lower, instead of raising the lower to the higher. The former, by a reverse process, seeks to uplift whatever is low, and indeed whatever is already high, by placing both on a firmer foundation, and rearing them in larger and loftier proportions. It is essentially constructive, and aims at strengthening, rather than undermining, the constitution of society. Again, Social Science is not Radicalism in the common sense. The latter goes to the root of things, with a determination to uproot them, while the former gives to the fibres beneath the soil, a firmer hold upon it, by freeing them from obstructions, and quickening their growth in breadth and depth. It is essentially conservative, not of the evil, but of the good which society contains, and which can be developed only by gentle and discriminating treatment. Social Science differs also from Philanthropy. This takes things as they appear, handles them as they seem to require at the moment, acts from impulse, that may or may not last, and seeks for the remedy, rather than the prevention, of ills which under this management often return in greater strength than before. But Social Science does not confine its observations to phenomena, or its efforts to the treatment of momentary symptoms.

It acts from convictions based upon careful enquiry, as well as enduring principle. It goes behind the effect to the cause, and tries to prevent, even more than to relieve, the errors existing among men.

The American Association is organized in four Departments. It thus covers the whole ground of Social Science, and yet breaks it up into divisions, which can be managed by themselves, as well as in relation to one another. Each Department is placed in charge of a Committee especially selected for the work, under whose supervision the various efforts of the Association, or its individual members, acquire consistency and effectiveness. Local Committees are established in different parts of the country, to serve as rallying points for the members in their neighborhoods. An Executive Committee has its headquarters at Boston, and there directs the general affairs of the Association. This plan of organization is designedly simple, for it is thought that anything like intricacy, or ostentation in the machinery, will impede its working.

The Association has two principal objects: first, to gather all the information within reach, both at home and abroad, with regard to Social Science in all its branches; and second, to diffuse this information throughout and beyond our country. Among the chief means to these ends, is the holding of public meetings, sometimes general, at which papers on various topics are presented, and sometimes special, at which a single subject, or class of subjects, is taken into consideration. During the past winter, meetings have been held in Boston and New York under our auspices, in order to further the Reform now proposed in the Civil Service. Private movements are set on foot in order to advance particular objects. At the present time, a Committee of the Association is preparing a pamphlet to contain a system of rules for the organization and administration of Public Libraries, together with a catalogue of books adapted to general use, in the hope that such a publication will tend to

promote the formation of libraries everywhere. Another plan, also entrusted to a Committee, embraces the selection of a limited number of casts from the antique to be placed in our Public Schools, and thus extend the knowledge and influence of Art. These projects are mentioned, not because they are the only ones in contemplation, for there are many others of a sanitary, economical and legal character, but because they sufficiently illustrate the practical designs of the Association.

In order to carry out the work thus sketched, it has been found desirable to issue a Journal from time to time, in which a selection from the papers and reports of the Association, together with information on appropriate topics, gathered from various sources, may be generally circulated. As the organ of a scientific body, it is committed to no theory, but opens its pages to different, and even conflicting views, in tolerance of all opinions thoughtfully formed and liberally expressed. It is intended to be suggestive, to stimulate observation, excite reflection, deepen sympathy, and thus contribute to the welfare of society.

The Journal is published under the general direction of the Executive Committee, who have appointed three of their number to superintend its publication.

HISTORICAL SKETCH OF SOCIAL SCIENCE.

THE Science of Society is not of recent origin. It may be said to be as old as the various branches of human thought and research, the fruits of which it seeks to gather and apply for the common benefit of mankind. But although its elements have previously existed in the sciences of Jurisprudence, Education, Political Economy and Public Health, and have been cultivated in societies organized to carry out particular investigations and reforms, it has grown into a distinct division of knowledge only during the present generation. To our age, so remarkable for humane tendencies, and to men of the race, which has ever proved its preëminent fitness to lead in great practical reforms, it was reserved to raise Social Science to the dignity of a special scientific pursuit, the high aim of which is the discovery and application of the immutable laws governing man in his social relations.

In the autumn of 1856, the late Lord Brougham, who had special qualifications for the place as the tried head of the Society for the Amendment of the Law, was invited to take the lead in founding an association, intended to unite all those engaged in efforts for the moral and material improvement of the British people. He assented readily, but owing to various causes, the plan of the originators of the movement could not be matured until July, 1857. In the latter part of that month, a private meeting was held in London at the residence of Lord Brougham, to consider, according to the call, the best means of bringing about a union of those interested in social progress. Forty-three persons were present. The meeting resulted in the adoption of a resolution, affirming the necessity of a closer union among the supporters of the different efforts for social advancement, and pronouncing for the establishment of the *National Association for the Promotion of Social Science*. A committee was appointed to give effect to the resolution, and immediately commenced its labors under the chairmanship of Lord Brougham.

The founders of the Association were impressed with the idea that, in order to induce the widest possible interchange of opinion, experience and information, both *a priori* reasoners and practical reformers, should be included in its organization. It was their purpose to accept aid from all quarters, without reference to classes or opinions; to elicit truth without propounding dogmas, and to maintain the most absolute freedom of opinion. With this view, the work proposed for the Association was divided into five departments, viz: Law Amendment, Education, Prevention and Repression of Crime, Public Health and Social Economy, which division has been preserved to this day. Competent persons were invited to prepare papers and reports, expressing their opinions and embodying their experience upon subjects within the scope of the five departments, and to read them at public meetings of the Association. This plan of operation has been adhered to in the main ever since.

The invitations of the Organizing Committee to persons throughout Great Britain, to participate in the labors of the Association, met with such hearty reponses, that a first general meeting could be convened in the fall of 1857. It was opened at Birmingham on October 12th, and continued for five days. The organization was perfected by the formal adoption of a constitution and the election of a permanent set of officers, of whom Lord Brougham was chosen chief by acclamation. The proceedings were of a very attractive character, and showed the deep interest already developed in the objects of the Association. They were opened with an address by Lord Brougham, in which he dwelled with great thoroughness and eloquence upon the task of the new Society, and upon the benefits he expected to result from its labors. Papers were read on the different days of the session upon topics relating to Education, Public Health, Social Economy and Law Reform, by Lord Stanley, Lord John Russell, Sir J. S. Pakington, Sir B. C. Brodie, Thomas Hare, G. W. Hastings, Miss Carpenter, and other high authorities. The meeting was a success in every respect, attracted general attention, and served to establish the Association on an enduring basis.

Since that time, the British Association has not only lived, but from year to year has gained numerical and intellectual

strength. True to its original purpose of promoting social reforms by scientific inquiry, it has pursued a career of unquestionable usefulness in spite of certain defects in its management, and of the doubts raised in many quarters as to its capacity for good. Its annual meetings, held successively in the leading cities of England, Ireland and Scotland, spread the principles of Social Science, and stimulated investigation of the facts, on which they are founded, among all classes. Branches of the Association were by degrees established in a number of the large towns of England, and more than eighty associations, following special objects, and scattered throughout the United Kingdom, became affiliated with it. That the Association has had a salutary influence upon government and society, is an admitted fact. Better municipal administration, especially in a sanitary respect, in many cities and towns; more intelligent dispensation of public and private charity; marked improvements in popular education; greater attention to economic sciences at the universities, and the inauguration of certain wholesome reforms by Parliament, may be mentioned among the results obtained. Nor has the influence of the Association been confined to Great Britain. It soon became a general centre of social information, commanded the sympathies and secured the coöperation of many leading minds on the continent. Its printed transactions, now grown into an imposing array of volumes, justly rank among the most valuable publications of our times, and have been so regarded by thinkers and reformers in all civilized countries. The contents of these volumes have had no little weight, indeed, in directing the process of social and political reorganization, progressing of late years in the principal States of Europe.

Not the least auspicious effect of the steady and extended pursuit of Social Science in Great Britain, was the incitement to similar efforts on the continent. Several distinguished economists of France and Belgium, among them, M. M. Michel Chevalier, Garnier Pagès, Corr-Vander Maeren and Desmarest, attended the fifth annual meeting of the British Association at Dublin. They were so much struck with the proceedings, that they conceived the idea of starting an international organization, by which the truths of Social Science might be propagated

throughout the other countries of Europe. After due consultation, they agreed upon the proposition of M. Corr-Vander Maeren, that the capital of Belgium, as the freest and most accessible of continental States, should become the seat of the projected society. The task of initiating the new organization was entrusted to M. Corr-Vander Maeren, whose position as Judge of the Tribunal of Commerce at Bruxelles, and former experience as the founder of several economic associations, especially qualified him for the work. Immediately after his return to Bruxelles, he organized a local committee, consisting of the most eminent men of the kingdom. The Committee prepared a constitution and by-laws, similar to those of the British Association, and in May, 1862, issued a circular to persons throughout the continent, asking their coöperation, and inviting them to attend the first international congress for the promotion of Social Science, to be convened at Bruxelles in the month of September of the same year. In order to insure the success of the first meeting, three members of the Committee were chosen as delegates to attend the sixth annual meeting of the British Association, and familiarize themselves more thoroughly with the work of that body. A resolution was passed on the part of the latter, assuring the "*Association internationale pour le progrès des Sciences Sociales*," of its active sympathy.

The international congress met on September 22d, of the year named, and remained in session four days, under the presidency of the Mayor of Bruxelles. Representatives of Belgium, Holland, Great Britain, France, Germany, Italy, Russia, Switzerland, and the United States, were present. The division of labor agreed upon by the Committee of Organization, and adopted by the congress, differed from the British plan. The number of departments was the same, but they covered a somewhat different ground, viz: 1st, Comparative Legislation; 2d, Education; 3d, Art and Literature; 4th, Charities and Public Health; 5th, Political Economy, including taxation, finances, commerce, industry and agriculture. As in Great Britain, public meetings and the publication of the transactions were adopted as the practical means of pursuing the objects of the Association, and another added in the form of pecuniary prizes to be offered for essays on given subjects. The

proceedings also varied from the British model. Few papers were read, and most of the time was devoted to the discussion of a number of questions in each of the departments, proposed by the Organizing Committee. The discussions were of an elevated character, and conducted in a fair spirit; but nevertheless, the preponderance of this element in the proceedings made the session less fruitful of substantial results, than it would have been, had the example of the British Association been more closely followed.

The second congress of the International Association was held in September, 1863, at Ghent, under the presidency of M. Vervoort, presiding officer of the lower house of the Belgium legislative assembly. It was as numerously attended as the first by representatives of different nationalities. The proceedings extended over a whole week. The mode of proceeding was the same at Bruxelles. Certain questions were proposed in the several departments, and elaborately discussed in separate meetings. The danger of violent clashings of opinion, with which discussions of this kind are necessarily always attended, was not altogether avoided during the session, but fortunately no serious discords were developed. Other annual meetings have since taken place.

Considering the obstacles, presented by the differences of language and national condition, as well as the complexity of social interests in the continental States, it would have been too much to expect the organization in question to do for all the countries represented within it, what the British Association has done for Great Britain alone. The International Association was intended to be a channel of exchange of thought and experience, rather than an instrument of direct action, and this useful function it has fulfilled to a great extent.

It must not be supposed that the International Association represents the totality of the efforts made up to this time on the Continent in the field of Social Science. In France, In Germany and in other countries, societies have existed for years, and pursued the search for and application of social truths in special directions, with great assiduity. Of these, the most active are the French and German, and among them the *Société d'Economie Politique* of Paris, and the *Volkswirthschaftliche Verein*,

(*Economic Society*) are the most successful. True these bodies touch upon but parts of Social Science, but what with the growing solidarity of the material and moral interests of all civilized nations, and the natural tendency of inquirers into social questions, to extend the range of their investigations, their labors are continually widening. Efforts have been making in France for some time, to organize a Social Science Association according to the British prototype, and have failed so far, only in consequence of obstacles interposed by the Government.

The American Association was founded in the autumn of 1865. Three years having been spent in preliminary efforts, which met with all the encouragement that could have been expected, it was decided by the Executive Committee to perfect the organization and extend the work of the Association. This is now in course of execution.

HENRY VILLARD.

INSPECTION OF COUNTRY SCHOOLS.

A PAPER READ AT THE ANNUAL MEETING OF THE ASSOCIATION, BOSTON, OCTOBER 14TH, 1868.

THE American system of public or common schools is based on the broad principle, that every child has an inalienable right to a competent education, and that the State is bound to secure to every child such an education, by means derived from the taxation of every man in proportion to his property.

On this broad and solid foundation our popular education stands. The general recognition of this great principle may be said to constitute the distinctive feature of the American system of public instruction. In accordance with it, school laws have been framed, very large sums of money have been raised, and a net-work of schools has been spread over the land. And thus the State has taken the first and great step towards discharging its acknowledged obligations to provide for the education of all the children of the people.

But the work so well begun has not yet been consummated. The schools so universally established have not yet fulfilled their legitimate functions. Notwithstanding the great good they have spread through the community, they have as yet but partially accomplished the object of their establishment. This is true to a certain extent of all our schools of different grades, both in the cities and in the country; but it is especially true of the country schools. It is a fact, which probably will not be disputed, that the great mass of ungraded district schools, scattered through the rural districts, are in a far less satisfactory condition than the schools in the cities and larger towns. It would not be just to assert, without qualification, that these rural schools have failed. They have without doubt been the source of incalculable benefit to the community; they have done, and are now doing, a noble work in diffusing general intelligence among the people, and they have been worth all they have cost and far more. In this view they have been a

success. Nevertheless, it cannot be denied that they are, as a whole, far inferior to what they ought to be, and to what they might be made. In this aspect they may be termed a failure.

Without specifying the deficiencies of these schools, it is sufficient for my present purpose to state in general wherein they fall short of fulfilling their design.

In the first place, there is, in the aggregate, a large number of children who are growing up in ignorance, without availing themselves of the advantages of the public schools or of any other means of instruction. Secondly, of the children who attend the public schools for a longer or shorter period, a large majority fail to obtain the education which the system is designed to furnish. Thirdly, the educational means provided are not economically employed. The time and money invested in these schools are not turned to the best account. For want of a proper adaptation of means to ends, the teaching power of the teachers, and the learning power of the learners, and, indeed, the educational forces of every description are to a very great extent wasted. Fourthly, the means provided for the maintenance and support of these schools, are not yet sufficient, even if wisely applied, to secure competent education to all who need it.

These statements, it is believed, will not be denied by any one who is well informed upon the present condition of the class of schools under consideration. Should they be questioned, abundant and painful confirmation of their substantial truth might be drawn from the statistics and opinions embodied in the State reports on education from every section of the country. The late Frederic H. Packard, Esq., of Philadelphia, published, in 1866, a book entitled the "Daily Public School in the United States," the leading object of which was to show the inadequate results of the American country schools. This author's judgment is too severe, without doubt, but we may derive profit from it. The facts, which he presents, are sufficient to warrant the conclusion that the education in our country, at the present time, is neither in character nor extent, what our political, social and industrial interests demand. This subject has also recently been discussed by the Rev. Dr. Ryerson, who has been for nearly a quarter of a century the Chief Superintendent of Education of the Province of Ontario, (Canada

West.) and who has no superior, probably, in knowledge of the systems of public instruction both in Europe and America. In a recent report to the Provincial Government on Popular Education in Europe and the United States, after speaking of the large sums of money raised and expended for schools in this country, he says:

"But here, in most of the States, the work has begun to halt, and the patriotic objects of its projectors have been disappointed. The State has acknowledged, and nobly endeavored to redeem, its obligation to provide an education for its every child; but it has not provided that every child should qualify himself by such an education for citizenship. . . . . It has made universal suffrage the lever to lift the masses to universal education and intelligence, in the absence of the requisite educational power to move the lever. Nor is there adequate provision to secure the operations of a school in a single neighborhood, much less to secure properly qualified teachers where schools are established. The result is, that when you leave the cities and large towns, and go into the rural parts of the State — the peculiar field of a national school law and system — you there find that our American neighbors are not so successful in their public school economy, and accomplish results very far below and short of the State appropriations they make, and the machinery they employ for the sound education of all the people."

This is the opinion of an impartial and competent judge. And if there are to be found some highly favored localities, where the schools are all that an intelligent educator or an enlightened patriot could desire, such localities must be considered as exceptional.

Such being the case, let us inquire into the cause of this failure. We are now in possession of the materials, necessary for the proposed investigation, in the exhaustive reports of French and English Educational Commissioners to their respective Governments, on the school systems of different countries in Europe and America; in the publications of Henry Barnard, Horace Mann, President Bache, and Prof. Stowe, on European education, in the report of Dr. Ryerson, already referred to, and in the reports of our State Superintendents of Public Instruction.

These official and authoritative documents establish the fact that there is an essential educational agency, without which a system of public instruction cannot completely accomplish its legitimate object. That agency is what in Europe is commonly called *inspection*, and in this country *supervision* or *superintendence*.

England does not undertake to provide schools for the people. The Government neither establishes schools, nor requires them to be established, but it offers, on certain conditions, to grant aid, as by building school-houses and increasing the salaries of the teachers. It leaves the initiative wholly to voluntary effort, but it takes care to provide a staff of inspectors to superintend the schools aided. The best authorities agree that the success of the English system is due to the excellence of this inspection. This is simply and solely an *examining* inspection; but within its sphere it is impartial, independent and efficient.

The growth of the common school system in Holland, is peculiarly worthy of attention from American educators. As to the excellence of the Dutch schools, there is undoubted evidence. When Holland was a republic, in 1806, the various edicts and regulations, relating to schools, were digested into a code, within five years after that the University of France deputed Baron Cuvier to visit Holland and to report on its public schools. The great naturalist expressed the warmest admiration of the system. He described the astonishment and delight, with which his first visit to a Dutch school impressed him. In 1836, Victor Cousin, in an excellent report to the French Government, expresses the strongest approbation of the Dutch system. President Bache in his Report on Education in Europe to the Trustees of Girard College, in 1839, says, "Among the primary schools of Holland, are some of the best which I visited, and the whole condition of popular instruction is worthy of a nation which has ever been distinguished for its virtue and intelligence." Matthew Arnold, the well-known author, in a report to the English Education Commission in 1860, says, "I have seen no primary schools worthy to be matched with those of Holland." The Rev. Dr. Ryerson, in the report above referred to, says, "I confess that no schools which I have visited in America, or in different countries of Europe, so

deeply and so favorably impressed me in regard to discipline, methods of teaching, order and neatness, as those which I have visited in the principal cities and towns of Holland." The range of study in these schools which are called primary, is about the same as that in our primary and grammar grades combined.

To what cause is this superiority to be attributed? On this point there seems to be no difference of opinion. The authorities already quoted, and all others I have been able to consult, agree in the opinion that it is due chiefly to a wise system of inspection. Mr. Arnold says, "The law of 1806 was very short and very simple, . . . but it did two things which no other school law had yet done, and which were the foundations of its eminent success; it established a thorough system of inspection for the schools, and a thorough system of examination for the teachers. To organize inspection, is, in fact, the grand object of the law of 1806; with this it begins, and with this it ends." To keep the system of inspection efficient was the central thought, the paramount aim of its author,* up to the very last days of his life. When a venerable old man, he received M. Cousin at Haarlem in 1836, and said to him, — "Take care how you choose your inspectors; they are men whom you ought to look for with a lantern in your hand." And, adds Mr. Arnold, "inspection in Holland was organized with a force and completeness which it has attained nowhere else." President Bache says in his report: "The most important provisions of the law are those for the inspection and management of the schools, and for the due qualification of schoolmasters. . . . The system of inspection is eminently adapted to a country where centralization has never existed, and has proved highly successful in its operation." Mr. E. Hickson, Principal of the Mechanics' Institute in Liverpool, in an official account of the Dutch and German schools, remarks, "The Dutch schoolmasters are decidedly superior to the Prussian, and the schools of primary instruction consequently in a more efficient state. This superiority we attribute entirely

*Van den Ende, 27 years at the head of the administration of the system.

to a better system of inspection. . . . In Holland, inspection is the basis upon which the whole fabric of popular instruction rests." We are warranted, then, in concluding that popular education in Holland, which, according to Mr. Arnold, for extent and solidity combined, has probably never been equalled, owes its distinction mainly to the completeness of its inspection. If we turn to France we shall not find there an equally effective system of elementary instruction. It was not until the passage of the school law of 1833, proposed by M. Guizot, then Minister of Public Instruction, that the maintenance of schools, previously optional with the *communes*, became obligatory. "This law," says Mr. Arnold, the best historian of public instruction in France, "had the great merit of being full of good sense, full of fruitful ideas, full of toleration, full of equity; but it had the still greater merit of attaining the object it had in view. It founded for the first time a national elementary education. But two defects in the system soon became visible, one was in the authorities charged to superintend, and the other was in the position of the teachers." We see here that the French system was weak precisely where the Dutch system was strong. The Minister, in his zeal for local action, had entrusted the charge of the schools to Communal or Parish Committees. But persons able and willing to perform this duty properly, were not found in the country districts of France. "But in 1835," says Mr. Arnold, "primary inspectors, those sinews of public instruction, were permanently established, one for each department, by royal ordinance." The subsequent modifications of the law of 1833, have been directed to the improvement of school inspection with gratifying results. "The primary inspectors," says Mr. Arnold, "are the very life of the (school) system; their inspection is a reality, (because made when not expected)." Thus the experience in France goes to confirm the principle, that good inspection is the condition of success in popular education.

The schools of the German States, and of Switzerland, afford further confirmatory proof of the vital importance of good school supervision. In Switzerland each canton has its own system of public instruction. Mr. Arnold visited five of the cantons and reported on their schools. In three he found

School Inspectors, and he remarks, "There are not two opinions as to the value of the services which may be rendered by these functionaries; and they will probably soon be employed by the two cantons which are now without them." In these he notices especially the inefficiency of the inspection of the schools, and the examination of teachers by the local Committees.

Although much attention is paid to the education of the people in all the German States, Prussia has long stood preëminent in this respect. "In no other country," says Dr. Ryerson, after his recent educational tour in Europe, "is there so thorough and universal Common School education." M. Baudouin, the French Government School Commissioner to Germany in 1865, says, "Nowhere, in fact, is instruction disseminated with so much liberality, given with so much disinterestedness, and directed with so much care." There is a regular gradation of authorities, from schoolmaster up to the Minister of Education. "All persons and classes," says Mr. Cousin, "who have an interest in the subject, find their appropriate place in this organization, and concur, each in his own manner and degree, to the common end."

Mr. Mann mainly devoted his report on the Prussian system of Schools in 1844, to the subjects and methods of instruction and to school discipline, but he did not fail to notice the system of inspection, "whose eye and hand watches and animates the whole."

Unquestionably the Common Schools of Massachusetts were at their lowest point of inefficiency while left almost exclusively to the control of their respective districts. At this crisis the State Board of Education was established, Horace Mann was chosen its Secretary, and charged with the duties of a State Superintendent. What followed? Normal Schools were opened, Teachers Institutes held, school-houses improved, appropriations increased, Committees invested with larger power, and placed under stricter responsibility. It is scarcely too much to say, that all the improvements of the last thirty years result from an improved supervision.

The experience of Massachusetts in this respect is substantially the experience of every State in the Union. Almost everywhere, the first important step was the appointment of a

State Superintendent of Education, and the results were similar to those in Massachusetts.

It was not until several years after the necessity of such an officer as a State Superintendent of Schools was generally admitted, that the necessity of the services of City Superintendents of Schools came to be acknowledged. Twenty-five years ago there was scarcely one City Superintendent in the United States, and the schools of the cities were, on the whole, no better than those of the country. Now, almost every important town, especially outside of New England, has at least one professional educator devoted to the supervision and inspection of the schools. Besides, important measures have been adopted with a view to secure the services of competent men as members of the City Boards of Education. These changes for the better have wrought a great improvement in city schools. I will here cite again the Rev. Dr. Ryerson. "Taken as a whole," he says, "I do not think, from my best observation and inquiries, that there is any country in the world in whose cities and towns (except Leipsic, in Saxony,) the systems of education are so complete and efficient as in the neighboring States."

It is an indisputable fact that the schools in the cities have quite outstripped the schools in the country, and it is also an indisputable fact that the schools in the cities have advanced in proportion to the improvements in their inspection. The history of education in New York and Philadelphia strikingly illustrates the effect of good supervision. Although the population of Philadelphia has been in its favor, the system of schools in New York has far surpassed that of the former city. It is quite impossible to account for the marked difference in the results, which have been produced in these two great cities, except by the difference of their supervision.

The Hon. E. E. White, late State Commissioner of Schools in Ohio, said in 1865, "We speak freely respecting the condition of the lower schools of Philadelphia, because we were not prepared to find such old-fogyism. A jury of intelligent educators would, in our opinion, pronounce them twenty-five years behind the district schools of Cincinnati, and we think the explanation of this result is found largely in the fact that the schools of Philadelphia are practically without supervision."

The Rev. James Fraser, a high authority, in his recent able report on the Common Schools of the United States and Canada, to the School Inquiry Commission of Great Britain, expresses his astonishment at finding the great City of Philadelphia without a Superintendent. In New York, on the contrary, we find the greatest attention paid to inspection, not only by professional Superintendents, of whom there are five, but by the various Boards of School Officers.

Thus it appears that, as in Europe, whatever degree of excellence has been attained in our schools is due mainly to efficient supervision, and that the unsatisfactory state of our country schools must be attributed to the absence of this wholesome influence.

Mr. Fraser, in the report already quoted from, says, "The great desideratum of the Common School system, both in Massachusetts and generally in the States, is adequate, thorough, impartial, independent inspection." . . . And again, "The idea upon which the American Common School system is based is the absolute competency of the township or local organization, by whatever name known, to determine for itself what is best to be done in relation to any of those interests in which it is supposed to be immediately and principally concerned." . . "A properly authenticated and *independent* officer like Her Majesty's Inspector of Schools among ourselves, armed with visitatorial powers, and with means provided for giving effect to his recommendations, appears to be the element wanting in the machinery of the system to give it that balance which the complication of its parts requires." With this judgment of the English Commissioner, the opinion of Dr. Ryerson is in perfect harmony. "The fruitful cause," he remarks, "of inefficiency in the American system of popular instruction, appears to me to be the mode of appointing the administrators of their school systems, and their tenure of office."

Finally, we have the testimony of most of the State Superintendents that the defects of the country schools are chiefly due to the want of a good system of supervision.

It only remains to glance at what is doing and what ought to be done for the improvement of School Inspection. The leaders in the educational revival which began among us fifty years

ago — Olmstead, Gallaudet, Russell, Carter, Woodbridge, Brooks, Emerson, and others — concentrated their efforts on the institution of Seminaries for Teachers. Their chief aim was to indoctrinate the public mind with the great principle embodied in Cousin's famous maxim, "*As is the* TEACHER *so will be the* SCHOOL," and thus prepare the way for normal training.

But the first result of the new movement was different from the specific object sought. It was the establishment of State Supervision, and through this instrumentality Normal Schools were instituted, and the professional training of teachers was introduced as an element of public instruction. Massachusetts took the lead in providing for State Supervision. An Act of the Legislature, passed April 19th, 1837, created a Board of Education, with authority to appoint a Secretary with the functions of a State Superintendent of Schools. The other New England States and New York, in the course of a few years, took measures to provide for State Supervision; and at length this educational agency came to be universally recognized as indispensable. Thus the first step in the right direction was taken, and the way opened for every desirable improvement. The history of the official labors of the State Superintendents of Education, during the last thirty years, is substantially the history of the progress of public instruction in every State in the Union.

The first topic discussed by Mr. Mann, in his first report on the School system of Massachusetts, was that of the qualifications and duties of School Committeemen. At the close of his service, in referring to this matter, he says, "Public opinion has now for twelve years been brought to bear upon this subject." In fact, the one subject which occupied his attention more than any other was that of perfecting the local supervision of schools by the town Committees. And here was, perhaps, his greatest success. On entering upon his duties he found that in two-thirds of the towns the examination of teachers was neglected; that in five-sixths of the towns there was no pretence of a compliance with the law in respect to the visitation of schools. On retiring, he could say, with truth, that the requirements of the law in these important particulars were "professedly complied with in almost every town, and in the great majority of them, substantially so."

The second result in educational reform, implied in what has been already stated, was the establishment, more or less complete, of District Supervision. This was very soon improved by the institution of County Inspection. The State of New York took the lead in this third great movement, by providing for the appointment of a Deputy Superintendent of Schools for each County. The success of this experiment induced other States to follow the example; and so rapid has been the progress in adopting this new supervising agency, that at the present time, there is scarcely a single educating State outside of New England, where the office of County Superintendent of Schools is not established.

In the meantime City Supervision of Schools has been rapidly developed. Our supervising and inspecting agencies, therefore, are of four grades, each having a distinct sphere. If the doctrine presented in this paper is sound, the future success of our popular education will be determined very largely by the character of these four agencies, and the special problem of educational legislation is to perfect them. To the State Supervisory Officers, in addition to the general administration of the system, appropriately belongs the function of recommending the legislation requisite for its improvement. The County Superintendents ought to be the principal working agents. It belongs to them to examine and license teachers, and to annul certificates for cause; to visit and examine all the schools and school districts, within their jurisdiction, as often in each year as shall be practicable; to inquire into all matters relating to the management, the classification, the course of study and mode of instruction, the text-books and discipline, the condition of the school-houses and appendages; to advise with and counsel the local Committees, particularly in relation to the construction, warming and ventilation of school-houses, and the adornment of school-grounds; to recommend to school-officers and teachers the proper management; to examine any charge affecting the moral and intellectual character of any teacher within their counties; to organize and conduct Teachers' Institutes; to advise in all questions arising under the operations of the school laws; to appoint meetings of the people for the purpose of addressing them on topics relating to the interests of their

Schools; and to report in all cases to the State Superintendent. To the town and district Supervisors belong all the duties not included in those of the State and County Superintendents. In the large cities, the functions of the Superintendents nearly resemble those of the County officers. But with this inspection, viz., of city schools, the subject before us is disconnected.

In many States, the choice of the Chief Superintendent is made by popular suffrage, a very objectional mode, as experience has shown. The term of service moreover is generally too short. The compensation is, in almost all cases, quite inadequate. There is, probably, not a single State where the salary of the Chief Superintendent is equal to that of the higher grades of teachers in the public schools. But it is encouraging to observe, that improvements in State supervision are in progress. From a survey of the whole field, it is quite evident that State supervision is most successful where there is a properly constituted Educational Council or Board of Education, with power to elect the Superintendent, and to make all rules and regulations, not conflicting with the General Statutes. This plan has been adopted in New Jersey and Maryland. In some States, by recent legislation, the term of the Superintendent's office has been exteneed to four years, and in others, the election is placed in the hands of the Legislature. But the County Superintendency, under State Supervision, and supplemented by Municipal Inspection, is the principal agency on which the success of country schools must depend. In all the States where it has been introduced, it has brought about highly beneficial results; but in those States, where its capabilities have been fully developed, its effects have been such as to warrant the conclusion that, with proper modifications, it is destined to work a radical reform. The following extracts from State Reports serve as an indication of the progress that has already been made in this direction.

The Superintendent of Public Instruction of Iowa says, "It is now nearly ten years since the first enactment of a law in our State creating the office of County Superintendent of Schools; and to the intelligent observer, there can be little doubt, that the rapid advancement which the schools have made within that time has been largely owing to efficient County super-

vision." From Wisconsin we have similar evidence. The State Superintendent says, "Our experience has not been unlike that of other States, where the testimony is strong, if not unanimous, that this educational agency is a necessary part of a good school system." The State Superintendent of Illinois is still more emphatic. He says, "County Supervision of Schools is the right arm of power in our system. It cannot be dispensed with. It has done more than any other agency to make our schools what they are." In Pennsylvania, the office of County Superintendent was perhaps at the outset more wisely constituted than elsewhere, the choice being made by the School Inspectors of the towns, in convention. Here we find its ripest and best fruits. The State Superintendent says, "The law (establishing the County Superintendency) has now been tried nine years, and these officers have performed a work that no other agency could have performed. Influences favorable to the course of Common Schools have been brought to bear upon the community, through the labors of the Superintendents, that could have been exerted in no other way."

Such are the results of this agency. Yet it is almost everywhere poorly paid. What has been said of the necessary modifications in the election and tenure of State Superintendents applies still more forcibly to County Superintendents. There is yet more need of increased compensation. Illinois has made the most liberal provision, by allowing five dollars a day for actual service. Wisconsin and New York have wisely disregarded County lines, and given each officer a nearly equal School population. A recent law in New Jersey gives the choice of Superintendent to the Board of Education, the people of the Counties having a veto. Could all these improvements be united, with the extension of the term of service, we might expect to see, in a reasonable period of time, the complete success of our country schools.

JOHN D. PHILBRICK.

UNIVERSITY EDUCATION.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION AT ALBANY, NEW YORK, FEBRUARY 17TH, 1869.

I fear the subject, which I have chosen, is rather too scholastic for most of my audience. When I first received the honor of an invitation to take part in this meeting, I chose a subject of more practical interest. But I gave it up, because, though strictly pertaining to economical Science, it had become, as I perceived, a party question in this country; and of course as a stranger and a guest, dependent on the kindness of Americans of all parties, not only for my social enjoyment, but for the fulfilment of the literary objects of my visit, I wish to keep scrupulously clear of party politics. Some years ago this country was the scene of events of universal import to humanity, and which, like the great European struggle of the Reformation, bound together for the time, men of the same principles in different nations. Now, these events have run their course, and the laws of international etiquette resume their sway. No disregard of those laws has been, or will be shown upon my part. The only connection which I have in this country, is with an institution remote from all party feelings and interests, in endeavoring to serve which, I endeavor to serve all parties alike. In politics I am, happily for myself, merely a spectator; I wish to be an unbiased one.

All questions, however, relating to education, from the highest to the lowest, have, at this moment, a peculiar interest. In Europe, men are saying that nothing but a system of public education, well organized in all its grades, can create, in place of the mouldering traditions of the past, a rational allegiance to institutions capable of preserving modern society from anarchy and confusion. In this country, it seems to me that the work of the pioneer, in the East and West, having been done, wealth having accumulated, the national mind having moreover been

stirred by a struggle similar in its intensity to those which preceded the Periclean era at Athens, and the Elizabethan era in England, the age of intellectual development is fully come, and that the intellectual institutions of the nation will now probably be cast in their destined mould.

In my own country it is primary education that is defective in system and extent; here it appears to be felt that the higher education stands specially in need of organization; with us it is the case of the poor that demands consideration; with you it is the case of the rich.

Fundamental questions touching the higher education have, however, arisen simultaneously in both countries. I left University affairs in a state of crisis and transition in England, and I find them in a state of crisis and transition here. In dealing with the subject, I will take as my standing point the University institutions of my own country, not only because I am familiar with them, while I cannot pretend to be familiar with the University institutions of America, but because the historical relations between the English Universities and those of America are such that some light may possibly be thrown by the history of the Universities and of University Reform in England, upon the nature of the crisis with which the founders and administrators of Universities are dealing in this country.

Not that I wish that those who have in their hands the destinies of University Education here, should be swayed by anything that is said or done on the other side of the water. On the contrary, the impression which I formed after such inquiry as I was able to make into the system of American Universities, in the course of a former visit to this country, was that the system here was too much a reproduction of that of the Old World, and that a system of high education, thoroughly adapted to the needs of the American people, and capable of taking a practical hold on their minds, yet remained to be created; that the problem in short was, as far as any such problem can be, an open one, demanding for its solution, original thought, though not inviting untrained and ignorant experimentation. And on the other hand, much of the language held in England against classical education, is really directed in the main, not against the use of the classics, but against

certain features of the classical system prevailing in that particular country, against the inordinate length of the course, which occupies, at School and College, about fifteen years, and against the excessive practice of Greek and Latin composition. Often, too, foreign writers and speakers may mislead those who do not know the persons, or the circumstances and influences under which they speak and write. I was sorry, though not surprised, to see stress laid by the organs of American opinion on the educational or rather anti-educational speeches of Mr. Robert Lowe. Mr. Lowe has been holding language adverse, not only to any existing course of Academical education, but to high culture generally. If he was correctly reported, he went the length of saying that he was ashamed to look a common mechanic in the face, because the mechanic had been taught things so much more useful than those which he had been taught himself. It was natural to ask why, if that was the case, he had so strenuously opposed the admission of the mechanic to political rights. Mr. Lowe is a man of great oratorical ability, with the development of which it is reasonable to suppose that his high classical education at Winchester and Oxford has had something to do, since he seldom makes a speech without going to the verge of pedantry in the use of classical allusion and quotation. But he is before all things a politician. At the time when he made these ultra-utilitarian speeches on Education, he had lost credit with his party, and placed his political fortunes in extreme jeopardy by his opposition to the Reform Bill; and he might naturally be tempted to set off against his backslidings on the question of the suffrage expressions of very advanced liberalism on other subjects. He was moreover courting the suffrages of the utilitarian University of London, of which he is now the eminent representative in Parliament; and this feature of his position also might, without his being conscious of it, in some degree influence his mind. Caution therefore should be exercised in welcoming him as a Daniel come to judgment against high education. So with regard to anything that may be said in controversies respecting the English University system by Mr. Matthew Arnold. Mr. Arnold is a writer in whom I think the literary object predominates over the practical, and with whom, therefore, it

would not be wise to take counsel, though it is most agreeable to take tea. He is a professed satirist of English character and institutions; his satire is perhaps salutary to his countrymen, and certainly amusing to every one, but it is satire, and the habit gives a bias, as it seems to me, even to those among his dissertations which appear most matter-of-fact. So far as he has a practical object, it is to induce his countrymen to give up their self-government and free development for the French and Prussian system of centralized administration, educational as well as political, an object quite unattainable in the United States, the people of which have entered decisively on a different path. I should therefore as little allow myself to be swayed by the utterances of Mr. Lowe or Mr. Arnold in one direction, as I should allow myself to be swayed in the other direction by the utterances of an English Conservative defending the old classical course of the English Universities, or the existing organization of upper education in England, because he thinks it congenial to the political institutions which he wishes to uphold.

The statutes of our Colleges, which were mostly mediæval, had become obsolete, and called for complete revision; the clergy had, through a series of historical accidents, acquired a complete monopoly of power and emolument in the Universities, one consequence of which was the almost total exclusion of Science; the doors of the national places of learning were closed against all denominations but the members of the State Church. The dissatisfaction caused by these evils, naturally spreads to our whole University system, and finds vent in expressions of general discontent; but they are evils to which you have no counterparts here.

The facts connected with the English University system and its history may be instructive to American inquirers, and the facts alone.

Let me explain what Oxford and Cambridge are. They are very peculiar in their organization, having, so far as I am aware, nothing analagous to them, unless it be the University of Salamanca, which has fallen into decay. Each of them is a federation of Colleges, of which there are at Cambridge seventeen, and at Oxford nineteen, besides five minor institutions for

the reception of students called Halls. The University is the Federal Government, legislates on subjects both of education and discipline affecting all the Colleges, holds the public examinations, confers all the degrees, and administers through its executive officers the general government and discipline of the place. It has also a staff of superior teachers, about thirty in number, whose lectures are attended by the students of all the Colleges, and to whom, with us, the title of Professor is confined. But each College is a separate and independent corporation, having its own estates, governed by its own Head and Fellows, in whom its property is vested, and exercising supreme authority over its students within its gates. Each has also its own staff of instructors, called Tutors, generally selected from among its Fellows, whose mode of teaching is usually by recitations, while that of the University Professors is by lectures. In the case of Physical Science, newly introduced among the subjects of our course, the method of teaching by recitation is less applicable, and the Colleges generally have not yet furnished themselves with scientific apparatus. The instruction, therefore, in this department, is at present given almost entirely in the lecture rooms of the University Professors.* The revenues of each College maintain the Head, a number of Fellows ranging from ten to forty, who are graduates, and with the Head form the governing body of the College, and a number of Scholars bearing a proportion to, but usually larger than that of the Fellows. The Scholars are undergraduates, receiving stipends as junior members of the foundation, but having no share in the government of the College. The incomes of the Heads range from five thousand to fifteen thousand dollars, those of the Fellows from five hundred to fifteen hundred dollars, the stipends of the Scholars, from three hundred to five hundred dollars, according to the wealth of the particular foundation. The Fellows and Scholars have also rooms provided for them. There are besides many Exhibition-

* I speak of the public instruction. In preparing for the examinations, private tutors commonly called "coaches," are a good deal employed, especially in the vacations, which are very long, but during which the more industrious students do not remit their work.

ers receiving stipends from estates of which the College is trustee, or from the Schools at which they have been educated, but not on the foundation of the College. The rooms in each College not occupied by members of the foundation, are filled with boarders, called Commoners at Oxford and Pensioners at Cambridge, who form the bulk of the undergraduate members of the University. Both Tutors and Scholars are now elected strictly by examination, the Fellowships of each College being open to all the members of the University; and probably the competitive examination for the Fellowships is as high and severe as any in the world. No duties are by statute attached to the Fellowships. Those which are held by Tutors may be regarded as part of the Tutor's stipend, which, from the smallness of the tuition fees, would otherwise be inadequate. The holders of the rest are supposed to be pursuing, and since the recent reforms securing election by literary merit, most of them are in fact pursuing their more advanced studies, general or professional, at the University or elsewhere; and it may be presumed, in a more liberal spirit and with more advantage to the study on which they are engaged as well as to themselves as students, than if they were in need of bread. But there is no positive security that the Fellowship shall serve any other public purpose than that of a splendid prize for academical industry; and the question is being discussed whether this is a provident use of public funds.

Till recently, every student was required to belong to one of the Colleges, which thus collectively were the University. The rule has now been relaxed at Oxford, where independent students are admitted, subject only to the regulations of a University Board appointed for the purpose. This is hailed as a return to the free system of primitive Oxford, when the students entered not through the gate of a College but through the broad portals of the University, and lived where they pleased, as they do now at a German or French University, the Colleges being in those days merely private foundations, few comparatively in number, and without any special privileges or power; a state of academical liberty for which the strict collegiate system was finally substituted under the formal rule of Laud. The non-collegiate students will be admitted

to the lectures of the University Professors, and be eligible to all University honors on the same footing as the Collegiate: but as they will be debarred from the recitations of the College Tutors, and from the social advantages of a College, it is not probable that they will be proportionally numerous, or that Oxford will cease to be practically what I have described her as being, a federation of Colleges.

In early times, the system of University studies was based on, and technically said to be "founded in" a course of Arts, or general culture, embracing all the subjects of instruction, scientific as well as literary, known to the Middle Ages, and which were so limited in their extent as to be without difficulty embraced by the student. After the completion of his preliminary course in Arts, the student passed to one of the three professional Faculties, Theology, Law and Medicine. A fourth Faculty, that of Music, was afterwards added, the representative, we may say, of the æsthetic portion of intellectual pursuits. In the Middle Ages, the central, and so to speak, solar study of the course of Arts, was the School Philosophy, a product of the human mind, associated in fact as well as in common opinion with much that was chimerical and grotesque, but never to be mentioned without doing homage to the power of sustained thought displayed in it, and to the great part which it played as a training of the reasoning powers in the mental development of man. On the revival of the classical learning, which carried everything by storm, the scholastic philosophy was supplanted by the classics, which thenceforth became the dominant study in the course of Arts at Oxford. At Cambridge, in the beginning of the eighteenth century, the influence of Newton gave the ascendency to the studies illustrated by his name, and thus Cambridge became distinctively a mathematical as Oxford was a classical University. Meantime the three Professional Faculties, to which the course of Arts had been preliminary, migrated or fell into decay. The Faculty of Theology, its subject ceasing to be treated scientifically or pseudo-scientifically as it had been in the Middle Ages, fell into decay, though the studies of the clerical profession of course continued to be pursued in the Universities, which, from the obligation imposed by College statutes on Fellows of taking Holy Orders, were, as regarded the

graduate portion of them, almost entirely clerical. Canon Law in like manner fell into decay. Its co-partner in the Faculty, Civil Law, migrated to the seat of the Judiciary in London. Medicine also, migrated to the great hospitals of the Metropolis. Oxford, when she awoke from the torpor into which, like the State Church, with which she had become so fatally bound up, she fell in the latter half of the last century, and revived her examination system, placed mathematics in a position of legal equality with classics, though in fact mathematics remained in a state of depression. At Cambridge, classics gradually asserted a more practical equality with mathematics, though mathematics are still the principal study, and the Senior Wranglership, which is the first place among the mathematicians of the year, the highest honor. Of late, under the pressure of a general demand for a more comprehensive system, both Universities have admitted Natural Science and Political Philosophy, including the principles of Jurisprudence, History and Political Economy, as optional studies into their general course. At Oxford these studies have been placed on a footing of perfect legal equality with the older studies, and made passports to the same honors. I have not the latest Cambridge regulations before me, but I believe that University has not gone quite so far. The old studies, however, yield the ground slowly, and retain a firm hold on those examinations which most determine the aim of the student, the competitive examinations for the Fellowships.

The general course, or course in Arts at Oxford, which extends over about four years, is now divided into two periods, of, roughly speaking, two years each. The first period is occupied by a course of classics and mathematics, obligatory up to a certain point on all, but with liberty of option between classics and mathematics beyond that point in the case of candidates for honors. In the second period, candidates have their option between four schools, that of Literæ Humaniores, or Classics with Ancient Moral Philosophy, Ancient Political Philosophy, and Ancient History; that of Mathematics, which in the case of candidates for honors, are carried very high; that of Modern History, Jurisprudence and Political Economy; that of Natural Science. It will strike you that the two last mentioned schools, that of Modern History with Jurisprudence,

and that of Natural Science are, unlike the schools of Classics and Mathematics, partly professional in their character — that they are preliminary at least to the special professions of Law and Medicine, rudimentary revivals, in fact, of the old Legal and Medical Faculties. They are, however, intended to be schools, not of professional knowledge, but of general culture, though of a culture embracing, optionally at least, all that is most important and interesting to man.

In the Middle Ages, the course of Arts occupied seven years, and each Faculty as many; so that the time expended by each student in passing through the successive degrees of Bachelor and Master in Arts and Bachelor and Master in his professional Faculty was fourteen years. But the real course in Arts now terminates with the Bachelors degree at the end of the third or fourth year. After that, the Masters degree is obtained by mere standing.

A great desire prevails among us to revive the Professional Faculties, our most eminent men in Law and Medicine being strongly of opinion that the character of the Professions has been lowered by their divorce from the Universities, and would be raised again by a renewal of the connection. Law it seems to be thought would especially be improved and elevated by scientific study under Academical auspices. It would of course be only in the strictly scientific parts of either Law or Medicine, that instruction could be given within the precincts of the University; for the rest the Universities would have to enter into a concordat with the Inns of Court and the Hospitals. Some progress, but not much, has been made towards the fulfilment of this desire; there is an examination for the degree in Civil Law, and I believe a thoroughly effective one for the degree in Medicine; but few students of either Faculty reside in the University. To render the Faculty of Theology effective in an age so full of religious division and perplexity, would probably be a very difficult task.

Here, however, we see the lineaments complete, though dim and belonging it may be to an irrevocable past, of that great mediæval idea of a University, which is the one intelligible thing, as it seems to me, amidst the perplexity in which we are now involved, and which therefore, it may be useful to fix in our

minds. It is an institution perfectly definite in its object, perfectly consistent and harmonious in its structure. It undertakes the whole intellectual training of those who are destined for the more intellectual callings from the time of their leaving school. It imposes, in the first place, a course of high general culture upon all alike, and it undertakes to determine of its own authority and upon its own responsibility, what that course shall be, allowing an option, if at all, not in deference to the mere inclinations of the students, or with an eye to their commercial or professional objects in after life, but out of regard for their educational needs and aptitudes alone. In determining the course, it has regard, not to utility, at least not to the money value of any study, but to the objects of general culture, the development of the faculties, the refinement of the taste, the awakening of intellectual desires, the production of those habits of systematic reading and sustained thought, which are the conditions of intellectual power. Perhaps culture is, properly speaking, a modern idea, and one which was hardly present to the minds of the organizers of Universities in the Middle Ages; but if a thirst for general knowledge created the Faculty of Arts, it comes practically to pretty much the same thing. This course of general culture is exacted as a condition preliminary to entrance on the study of one of the liberal professions. The previous course of study elevates the profession and ensures its liberal character. The professional study which is to follow, gives an aim and an inducement to the previous course. Of the professional study, utility is of course the object; it is the pursuit by which the student is to earn his bread; but the University undertakes that it shall be carried on in the highest and most liberal spirit, and with a general reference to the improvement of the study as well as to the instruction of the student. The professional studies admitted, are only those of an eminently intellectual character, and those for which it is of real use to prepare the student by a high previous training. This, I repeat, whether practicable in our days or not, whether it was thoroughly realized in its own day or not, is a perfectly clear and intelligible idea, and one to the grandeur of which we must render homage. It is worthy to stand beside whatever else was great and vigorous in the

Middle Ages, beside the Cathedrals, the poem of Dante, the theology of Anselm and Acquinas, the rule of Benedict of Nursia.

But we must remember the historical conditions under which the Mediæval Oxford or Cambridge existed. It existed in an age before printing, when the only source of instruction was the oral teaching of the professor, and the professors were all gathered together in some particular spot which, from its natural or political advantages, afforded shelter to peaceful learning from feudal violence. It existed in an age when guilds and privileged bodies, industrial as well as literary, exercised an authority which in the industrial sphere cannot be exercised now, and which in the literary sphere is exercised with difficulty even in England, with far more difficulty here. It existed in an age of formal rules and laborious initiations, when an artizan served a seven years apprenticeship in his mystery, as the student went through seven years of study before his inception in Arts, and again before his admission to the Doctor's degree in his Faculty. It existed in an age when the liberal professions stood out clearly from the rest, so as to be easily defined for academical purposes, and before the growth of such callings as Civil Engineering, Mining, Dental Surgery, Scientific Farming had raised perplexing questions as to the range of the term liberal, and the limits of the Academical sphere. It existed in an age when the competition of commercial pursuits with those of Academical learning and science for the allegiance of active-minded youth was nothing like so great as it is everywhere, but especially in the United States, at the present day; when, in truth, the shortest path to wealth and greatness for any one but a military adventurer lay through the University, which was the Eldorado as well as the Nova Atlantis of the time. It existed, finally, in an age when students at a University could be treated like schoolboys, and compelled, by schoolboy discipline and punishment, to pursue studies in which they had no special interest, and for which they had no particular taste.

This intelligible University system of the Middle Ages, however, in the course of time and under the pressure of modern exigencies, has been and is still being modified, limited, clubbed in various ways, and mingled with elements more or less extra-

neous, which aspire to the dignity of University studies, and which there is not authority or clearness of conviction enough to exclude. The long periods of study enforced in the Middle Ages have, I believe, nowhere been retained, except as mere forms. But in some of the European Universities, (in those of Italy, for instance, if I rightly understand their constitution,) the general culture denoted by Arts has been altogether lopped off and delegated to the Academies, so that the University is reduced to a mere plan of professional training. In the use of Oxford and Cambridge on the other hand the professional part denoted by the Faculties of Theology, Law, and Medicine has been lopped off, and the University has been reduced to a mere place of general culture, a continuation on a higher level of the classical school, the state from which Oxford and Cambridge are now, as I have said, endeavoring to emerge. In the case of the German Universities again we have the Faculty of Philosophy, which is that of general culture, and equivalent to Arts, placed alongside of the Professional Faculties, the student taking his option between a general and a professional course. Institutions quite unlike in their present character, though having a common origin, and down to a certain date a common history, are thus called by the same name and vaguely regarded as of the same kind. Lastly, from the desire for utility and compression, and at the same time from the natural tendency of everybody and of every institution to bestow upon themselves the highest grade and title, the lines of separation are being blurred on the one hand between the University and every branch of technical training place, and on the other hand between the University, the Academy, and almost the Primary School.

The first modification, that which makes the University merely a place of professional study, raises the question why different professions should be studied in the same place. Would it not be more convenient to study Law where Law is practised, and Medicine where there are the largest hospitals? I have mentioned the difficulty which we find in bringing Law and Medicine back to Oxford from the Inns of Court and the Hospitals of London. The answer given probably will be that it is desirable both on social and intellectual grounds for the

students of each profession to mix with the students of other professions; that it opens the mind, obviates the tendency to professional prejudice, and binds together the intellectual classes of a nation. The validity of this answer depends of course upon the degree of intellectual intercourse which the students really hold; for if they are merely boarding in the same city and attending different lecture-rooms, the interchange of idea and sentiment on the subject of their different studies can hardly be very great. The main question, however, is whether the object altogether is not too artificial and refined to balance any strong considerations of practical convenience. This is the question I mean, if we are founding new Academical institutions: of course institutions once founded and rooted in long habit, such as the professional Universities of Europe, may go on indefinitely as they are.

The second modification, that which makes the University a place of general culture and a continuation of the Academy, is the one with which I have personally had to deal as a Tutor and Professor of the University of Oxford, and as one engaged in the recent reforms there. I frankly confess that my acquaintance with it has often raised in my mind serious doubts as to the expediency of taking ordinary youths from practical callings, or even from their homes, and bringing them to reside for three or four years in a University city with no object more definite than that of general culture. Do most of them get—is it possible that most of them should get—anything like their money's worth? Do most of them receive—is it possible that most of them should receive—anything like an equivalent for the moral risk, the risk of cultivating habits of idleness, extravagance, coarse and selfish indulgence, which under the best system of Academical discipline, they inevitably run? Few, very few, and made, not of common earth, but of the finest clay of humanity, are they who really love knowledge and desire culture for its own sake, and on whom you can depend to work heartily for the purpose of self-improvement without the spur felt by a man engaged in the study by which he is to earn his bread—a spur under the influence of which I have frequently seen the idler of Oxford transformed into the industrious student of the Inns of Court. In cases where the natural taste for liter-

ature, for philosophy, for science, is wanting, how are you to enforce the industry in the absence of which vices enters in with a flood? The answer of the Middle Ages was, by scholastic and monastic discipline, including corporal punishment, for the infliction of which the Statutes of Mediæval Universities and Colleges expressly provide. The answer of the Universities of Oxford and Cambridge is, by a severe system of high pressure competition for prizes of immense value—a competition which sometimes prematurely exhausts the energies needed to carry the student up the steep hill of life, and which is scarcely conducive in any case to the formation of a very happy character. But the stimulus of competition after all affects only the ambitious. As to a large proportion of our Oxford and Cambridge students the answer practically is, that they are the sons of wealthy parents, that they are not going to make their own bread, that they have nothing better to do, that they must be somewhere in the years between School and settling in life, that if they are at the University they may pick up something, that at all events they will form acquaintances for after life and gain a knowledge of the world. That world of which they gain a knowledge is too often a world of sensuality unrestrained by the influence of home, untempered by the refinements of a society made up of people of different ages and sexes. Great hopes are entertained from the introduction into the curriculum of the principle of election—the principle, that is, of allowing the students to choose for themselves the study for which they have most taste. I have no doubt that the principle is a good one, though its application must be kept within bounds if we would not have the curriculum break up and the authoritative system of culture altogether disappear. Its introduction into the Oxford system has produced an increase of industry. But we must not forget that a large number of the students who are commonly brought to Universities can hardly be said in an effective sense to have a taste for any literary or scientific subject at all. Many, out of the courses set before them, simply elect the easiest. When I became a Professor at Oxford, the law of the University was that every student must attend a certain number of courses of the Professorial lectures—which courses was left to his own election. One term I was surprised by a vast increase in the number of

my class. I found that the account of the matter was that another Professor in quite a different department was ill, and that his pupils had transferred themselves to me. The connection between our two courses was simply this, that the shortest of all the professorial courses was his; the next shortest was mine. I state these doubts and misgivings plainly. In dealing with Oxford, I felt no difficulty in acting on the precept of the oracle, Sparta is thy lot, go, make the best of it. To sweep away obsolete codes of Mediæval Statutes, to throw open Fellowships and Scholarships to Academical merit, to restore the efficiency of the Professoriate, to put the old classical studies fairly on their trial by abrogating their monopoly, to do away with sectarian tests and restrictions, were objects clearly good in themselves; and it was clearly a good thing for the whole educational world that these old Universities should be placed in a position as far as possible to fulfil their own ideal, and to enable us to decide whether it was still practicable and suitable to the requirements of modern times. But when we are building up new institutions we must be careful to see that the ground on which we build is firm. I mentioned as one of the historical conditions under which Universities had existed, the absence in those times of printed books. A young man while learning a profession or his business at the present day if he has any sort of taste for reading may pick up a certain amount of general culture by the way; while his professional or business training, if it is anything above mere routine, in itself sharpens and strengthens his mind. Is the difference between the College culture of the unambitious student and the culture thus picked up really so great as to balance the outlay of a large sum of money, the devotion of several precious years, and the danger of demoralization? That, once more, is the question upon which I earnestly desire, but have not yet been able fully to satisfy my mind. Practically I found that when I was consulted as to the expediency of sending a young man to my own University, I asked whether he had a decided taste for study, and if I was not assured that he had, I advised that he should not come.

A University the system of which consists of a course of general study alongside of professional courses, the student being left to choose whether his education shall be general or profes-

sional, has evidently no logical account to give of itself. The only account which it can give of itself is that it has settled down into its present shape under the pressure of some practical need, such as the existence of a class of students who wish to be at a University and to take a degree, but who do not wish to enter any profession. This at least is the only account which can be given, unless the general course is made virtually professional by being used as a training school for teachers.

The last phase of University organization which I mentioned, the mixture of the University proper with institutions having nothing of the Academical character, especially with technical schools, can only be regarded either as a final dissolution or as a sort of process of fermentation out of which some new ideas of a University will at last arise. That it is a final dissolution, and that the University, the sphere of which, in all its modifications, is high and liberal education, is about in this practical age, and notably in the most practical nations, to give way to the school of practical science with perhaps certain useful accomplishments, such as modern languages, superadded, is a suspicion which has more than once crossed my mind.

Supposing it to be settled that Universities are to be places of professional study, the question arises what professional studies are to be recognized as within the Academical pale. Thus much seems clear, that the list can no longer be confined to Theology, Law and Medicine. Other professions have arisen in the progress of modern Science which probably demand as much intellect and are as well entitled to the name of Liberal as the sacred three. On the other hand there must be a limit somewhere, if the name University is to retain any significance, and if the University is to be at all distinguished from the mere technical school. And where is this limit to be? If the preliminary course of general culture were still exacted, the question would practically settle itself, because none would come but those to whose professional studies a high course of general culture was a natural and useful introduction. But this position has been in fact abandoned, and the responsibility is cast upon the governing bodies of Universities of drawing a line which is exceedingly difficult to draw. It might have been thought that Mining and Dental Surgery were clearly outside

of the limit; but both have been already admitted within it. Can any element of homogeneity be assigned, binding together naturally such groups of professional studies as the founders and reformers of Universities seem now to hold it their duty to embrace? If no such element of homogeneity can be assigned, where, we must once more ask, is the advantage of collecting together into one place, and including within the same institution things entirely hetrogeneous to each other? Would not Classics, Philosophy, Jurisprudence, Mining and Dental Surgery fare better if each had a separate training-place of its own?

I suspect we are somewhat influenced, without being conscious of it, by the current translation of the word University, as though it meant a place of universal science and learning, when in fact it means only a corporation.

These are importunate questions, but when we are more deeply committed, they will meet us in a more importunate form.

Supposing that a general course be retained, whether as preliminary to the general course or as collateral to it, we are called upon to decide anew what the elements of this general course shall be. What position is to be held henceforth by the Classics? That is the main question now for directors of liberal education. Let us approach it in a rational spirit, neither defending the Classics with fanatical devotion, nor assailing them as though they were criminal usurpers; but placing ourselves, if we can, at the true point of view, and considering what measure of change is really required. Nobody concurred more cordially, or took part more actively than I did in breaking down the monopoly of the Classics and welcoming the new studies, in my own University; but I wish to avoid alike the bigotry of Conservatism and the bigotry of innovation.

Undoubtedly the intrinsic value of the Classics has been greatly diminished since the period of the Revival of Learning, when they were first adopted as the staple of high education. There was, at that time, no other literature worthy of the name; no philosophy but the arid speculations of the schoolmen; no history but the monkish chronicle; no oratory but the monkish homily; no poetry but the monkish hymn. The Greek and Latin languages were then the caskets in which all the treasures of intellect were enclosed: and it was as the key to that casket,

not as a mental gymnasium, that Grammar was established as the prime instrument of education for both sexes alike. In fact, it was expected that Greek and Latin, as alone containing any writings worth a cultivated man's notice, would be the languages, we may almost say the vernacular languages, of the cultivated world; and the universal practice of Latin composition in prose and verse, no doubt, had reference to this expectation: Erasmus and Politian did not suppose themselves to be writing in a dead language: they supposed themselves to be writing in one of the only two languages in which writings would live. But we have now not only a modern literature, but three or four modern literatures, each of them equal to the ancient in intellectual power, and of course far superior to it in depth and range both of thought and sentiment, and in nearness to our personal interests and feelings.

Nor is this all; the claim of literature and philosophy altogether to monopolize the higher education, or even to be its principal elements, is challenged by Physical Science, which in the sixteenth century had not advanced beyond the Physical Works of Aristotle.

These are evidently strong grounds for a revision of the system. On the other hand the superiority of Greek and Latin as languages, and as instruments of linguistic training, to the modern languages, appears to me to be undiminished. In fact, it is constantly increasing, since a flood of extraneous and heterogeneous elements, themselves to a great extent classical, though often hideously barbarized, is constantly flowing into the modern languages, principally through the vocabulary of Physical Science. Greek, especially, if you compare it with any modern tongue, seems from its symmetry, its richness of inflection, its unlimited power of forming compounds, its liberty of arranging the words of a sentence in the order of thought, alone worthy to be the organ of the human mind. So marked is this superiority indeed that I can hardly believe that the destinies of the two ancient languages are yet accomplished, or feel sure that Latin will not some day be again the language of Law, and Greek the language of Philosophy and Science. So far, therefore, as linguistic studies are an essential part of education — so far as the habit of analyzing language is necessary or conducive to the perfec-

tion of the powers of thought, Greek and Latin seem to me still to hold their ground. The only linguistic study which can compete with them, as it appears to me, is that of our own language, which, though eminently wanting in the peculiar qualities which I have noted in the Greek, makes up for that want by some peculiar qualities of its own, but above all by its vast practical importance as the organ of our daily thoughts, constantly reacting on the thoughts which it expresses. At all events the culture of the English tongue is a duty to which the attention of all educators ought to be turned. Cultivate your language and it is one of the highest instruments of civilization: neglect it and it becomes a vehicle of barbarism.

The usefulness of a knowledge of modern languages is beyond question. But we now suppose ourselves to be laying out a course of general culture, and we must consider what is conducive to culture, not merely what is useful. The power of reading the modern languages is acquired with great facility by any one who has undergone the linguistic training of Classical edution, especially in the use of French, Italian and Spanish, to which Latin is the master-key. The power of speaking a language can be acquired to perfection only in the country in which it is spoken; and it is there acquired with such ease that to go to a University for it would seem a waste of time. At Oxford we have declined, hitherto, to admit the modern languages into the University course, except so far as a knowledge of them may be useful to candidates for honors in the School of Modern History: but we have an institution for teaching them called the Taylor Institution, with four teachers, German, French, Italian and Spanish, a Professor of Modern Literature and a library of foreign books and periodicals. Two Scholarships are given annually by examination to the most proficient among the students, and the examination is conducted in such a manner as to test as far as possible not merely a conversational knowledge of the languages, but the critical and literary acquaintance with them which could alone be thought an equivalent for Classical Scholarship and a worthy product of high culture. But the winners are so often students of foreign parentage, or who have lived abroad, as to suggest a strong mistrust of the value of proficiency in these studies as a criterion of the proper work of

a University; and when I was last at Oxford there were thoughts of abolishing the Scholarships altogether, as being useless for Academical purposes, and of applying the fund to the other objects of the Institution.*

A Classical education ought to include, and that which a candidate for honors received at Oxford did include, besides a philological knowledge of the Greek and Latin languages, a thorough acquaintance with the works of the best Classical authors, philosophers and historians as well as orators and poets. As I have already said, the Ancients, in every department of literature, are surpassed by the Moderns in present interest. But taken as a whole they still seem to me to constitute the best manual of Humanity. For this purpose they have even an advantage in being remote from the questions and the emotions of the present time. We have been asked whether a knowledge of Goethe, for instance, is not as valuable as a knowledge of any author of Antiquity. One answer to that question is that to study Goethe with profit, the mind of the student must be tolerably mature, able in some measure to appreciate the influences, religious, philosophical, political and personal, under which Goethe wrote, to take a stand above those influences and calmly to discriminate in their complex result, truth from falsehood, good from evil. But this is too much to expect from a youth under education brought into contact with such a writer as Goethe. The Classics present Humanity entire but with transparent simplicity, with statuesque calmness, free from modern bias or influence, near to our sympathies (for Homer's nature is ours,) but far from our controversies and passions. It would be difficult to suggest any course of modern philosophy, history, oratory and poetry of which the same could be said.

There are more ways than one of teaching the Classics. They may be taught drily and pedantically; or they may be taught as a man of cultivated and comprehensive mind would teach them, enlarging their scope and increasing their interest by commentary and modern illustration. Supposing the style of teaching to be the highest, are there any better text-books of history even now

*It is now, I see, formally proposed to move in this direction, not by abolishing the Scholarships, but by reducing one of them to an Exhibition.

than Thucydides and Tacitus,—is there any better text-book of Polities than the treatise of Aristotle?

In point of form at all events, and as models and schools of pure taste, the classical writers are still peerless. Our use of the term classical to denote faultless beauty of form is a popular testimony to the fact. On different races Nature bestows different gifts. The Greek she endowed above all races with the sense of beauty. I saw the other day, in the house of a friend, an excellent judge of Art, two casts, one of a great work of Michael Angelo, the other of a great work of Phidias, hanging side by side: and my friend pointed out how superior, not of course in poetry or depth of sentiment, but in artistic beauty, was the masterpiece of the Greek. There is no part of our old classical system which is more decisively condemned than the general practise of Greek and Latin versification. But even this practise exacted, in the first place, a very intimate acquaintance with the Greek and Latin poets, and, in the second place, cultivated the taste for form. I have heard one of the most experienced Chiefs of the English Press remark that his best writers had generally been men who had excelled at School and College in verse composition. It is not in a new country, where the historical monuments and Works of Art which in old countries cultivate the sense of beauty are for the present necessarily wanting, that we can afford to expel the beauties of the Classics from our course of education without finding something to supply their place.

Of course we may have translations; and it is time that some really good English translations should be made. But great poets cannot be translated at all, great orators cannot be adequately translated: no works can be adequately translated of which, as of the works of Plato and Tacitus, a principal excellence is the style.

The fatal objection to classical education, as it has fallen under my experience in my own country, is that it fails with the great mass of the students. The great mass of the students, though so many years of their life are mainly occupied in the study, at the end of their course have not acquired a sufficient knowledge of Latin and Greek to read the ancient authors with facility, to appreciate their beauties, or to receive from them

any mental culture beyond the mere exercise of the faculties involved in getting up any subject for an examination. They have read only a few authors, translate them with difficulty, and on leaving the University lay them and all classical studies aside forever. Whether these same men could be brought to study with success any other subject requiring as much mental effort as the Classics, or to undergo high training of any kind may be doubtful. The increase of industry at Oxford which I mentioned as having followed the adoption of the elective system of studies is found mainly in the School of which Modern History is the staple: and, with all due loyalty to the subject of which I am a Professor, I must say that the intellectual effort undergone in getting up a certain amount of Modern History for Examination, does not seem to me to be of the severest kind. As a mental discipline, and a mode of acquiring mental power, I could never place it on a par with the classical school.

As to the position of Physical Science in University Education, there is only one remark which I will presume to make. It must depend not on the intrinsic value of the subject, which is incontestible, but on its value as an instrument of education. The two ideas must be kept distinct, and for Academical purposes the idea of educational value must be kept predominant; though in fact the two may coincide, and though the intrinsic value of a subject certainly constitutes a large element of its educational value, while nothing can be more absurd than that ultra-ascetic theory of education which assumes that grinding at a treadmill exercises the mental muscle better than grinding corn. It is impossible to overrate the educational value of that discipline of exact and rigorous investigation checked at every step by facts which is supplied by Physical Science, and perhaps, at present, by Physical Science alone. But that the student may really undergo this discipline, a department of science must be selected which he can thoroughly master. A mere smattering will not suffice. It is open now to everybody to gather from lectures and popular works the leading results of Science, and to imbibe the general ideas which it suggests as to the universe and the estate of man, without going to a University for the purpose. What departments of Physical Science are at present in such a state that a student in his general University course

may thoroughly master them, still leaving room for philosophy and literature as the study of Humanity, it is for the professors of Physical Science to decide. I say, leaving room for literature as the study of Humanity. The evils of a merely philosophical and literary training without science in my own country are well known: the evils of an exclusively scientific training without philosophy and literature are already beginning to appear.

It would be great presumption in me, upon so short an acquaintance, to pronounce an opinion as to the tendency of the crisis in University affairs of which I am a witness in this country. But if I am to state a mere impression, it seems to me that the system of regular courses with its machinery of classes and of degrees as tests of general culture is in a precarious condition; and that the course of things at present tends towards a University which will not be so much a place of mental discipline as a repertory of various kinds of knowledge to which the student may come, choose his own department according to his inclination or destination in life, receive a certificate of proficiency in that special subject and go his way. The multiplication of courses and the looseness with which students are permitted to choose their own subjects and to shift from one subject to another almost amount to a practical abandonment of the authoritative principles of a general course of study: and when that is abandoned the system is at end. The degrees, multiplied in the same manner, cease to carry any definite meaning to the public ear. In the latest of your foundations I find the two systems, that of courses and that of departments existing side by side, and it seems to me that the system of departments, though it may not have made much way as yet, has in it a stronger principle of vitality than the other. Should this be the ultimate result, the character of the University will undergo a great change; but it may be a change in accordance with the exigences of the country and the times. Education will, however, still have, like religion, its counsels of perfection. If those who have the means and the leisure will continue to undergo a thorough course of general culture, it will still be the best tribute which they can pay their country.

The value of University degrees, and their efficacy as inducements to go through an Academical course, appear in this country to be almost irrevocably lost. They would have been long ago lost in England if each of the Colleges in Oxford and Cambridge were a University in itself, granting degrees of its own authority to its students. But I have already explained that with us the Colleges are members of a University which holds the public examinations and grants the degrees. I must say, however, that even in the case of the English Universities, the ordinary degree can hardly be regarded as conferring any literary rank. Our students are divided into passmen or candidates for an ordinary degree, and classmen or candidates for a place in the list of honors, who undergo a separate and much higher examination, and are arranged in accordance with the results of that examination, at Oxford in four classes, at Cambridge in the order of individual merit. It is the place in the list of honors, not the ordinary degree, that really confers literary rank. It is the competition for honors also that keeps up the standard; for before the institution of the Class-list at Oxford, when we had only the ordinary degree, the standard, whatever it might be theoretically and legally, practically fell very low. Sometimes I have been inclined to doubt whether the formal bestowal of literary rank was not a mediævalism, destined to fall into the general grave of the Middle Ages: at other times I have thought that it might still have its value, and perhaps an exceptional value in democratic communities, where no other kind of rank except political rank existed. Thus much, however, seems clear: if the system of granting degrees as certificates of high education is to be retained, the degrees ought to be made genuine; and they can be made genuine only by vesting the power of granting them in some impartial and trustworthy authority. A federation of Colleges for the purpose of examination and graduation is the most obvious mode of effecting the object. We have seen an example of such federation in the case of the Colleges of Oxford and Cambridge; and an example still more pertinent to the present case is furnished by the Queen's University in Ireland, which consists of four Colleges in different parts of the country, having a common board for the purpose of holding examinations and granting degrees. I have said that the institution of a

list of honors appears from experience to be essential to the maintenance of a very high standard. Whether such distinctions would be in accordance with the habits and sentiments of the people of this country, it is for those who know this country to decide. I have myself no strong desire to resort, in in any case, to the stimulants of ambition.

Certificates of proficiency in special departments granted by Colleges to their own students may be of more value than general degrees, because the efficiency of the College in a particular department may be better known to the public than its efficiency as a place of general instruction; but even in the case of such certificates the decision of a superior and impartial authority would evidently be far more satisfactory. It is felt in my own country, and I am told it is felt here, that in those callings especially, where ignorance on the part of the practitioner is fraught with danger not only to the property or the convenience, but to the habits and lives of his fellow citizens, security for competent knowledge ought to be exacted: and the only real security is a system of trustworthy certificates. No centralization, no bureaucracy, no abridgment of rational liberty is involved in the combination of colleges or other places of instruction for such a purpose: it no more derogates from the completeness of self-government and freedom of development, than does submission to mechanical laws in the construction of a machine.

On the other hand, if the departmental system is the system of the future, it will surely be necessary that the several Colleges should consider how many departments they are competent to undertake. If each undertakes all — if each professes to teach every subject of human knowledge and to provide libraries and apparatus of every conceivable kind, with resources perhaps only adequate to the proper maintenance of one or two departments — the results cannot fail to be superficial, illusory, and worthless. In the work of education above all things, genuineness, strict veracity, faithful performance of every profession ought to be the rule. A great service would be rendered by any founder who would establish a single department on the very best footing, with a full supply of professors, assistant professors, books and scientific apparatus, as a specimen of what thorough instruction with first rate appliances might be. The distribution

of the different departments among the several Colleges of a State would no doubt be a matter of considerable difficulty, especially when the Colleges, besides being to some extent rival institutions as places of education, are connected with particular religious communities.

Among the bad effects of undertaking too many departments, it can hardly fail to lead to the degradation of the class of teachers. The resources being inadequate, the tendency will almost inevitably be to hire teachers at the lowest market rate, and to set them to teach for as many hours in the day, and as many pupils as possible; and perhaps, what is still worse, to teach two or three different subjects. Such a system would make University education worthless, and bring learning and science themselves into contempt. It may be true that in very new countries things must be done in a very rough way. But here we are in a country which has now come into full possession of vast resources, which is full of intellectual life and aspiration, in which the works produced by European learning and science find their largest market, in which the liberality of founders and benefactors is more flowing, perhaps, than it ever was in any age, or among any people, which is as capable of supplying its institutions with all the material of greatness as the most heraldic nation of the old world. Let them build log-universities if they will in Natal or Alaska.

An Academical teacher cannot worthily discharge even his educational functions unless he has some leisure for private study, and is enabled to keep himself on a level with the advancing thought of the age. If he is merely retailing the little stock which he gathered himself as a student, his intellectual poverty will reappear in the minds of his pupils.

*Invalidique patrum referent jejunia nati.**

But a University worthy of the name has two duties. Education is one: the national advancement of learning and science is the other: and the Professors, while education is their direct duty, ought to discharge both. This is more clearly recognized at present in the old world than in the new. In the great

* This line is quoted by Bacon in a weighty passage of the *Advancement of Learning* bearing on this subject.

Universities of Germany and France, there are professors of a superior order, who are called upon to do comparatively little of the drudgery of tuition, which is undertaken by assistant professors or teachers of a lower grade, and who have abundance of leisure for private study and research. The greatness and usefulness of the German Universities especially are closely connected with this part of their constitution, as not only the learned world but the world of practical science has good reason to acknowledge. At Oxford, as we have seen, there is besides the College Tutors and the Private Tutors, on whom the chief burden of tuition falls, a corps of University professors, whose number and stipends are still being increased, whose educational duties in the course of the year are very moderate, and who are in fact appointed less for the purpose of lecturing than for that of sustaining the credit of the University in their several departments of learning and science. Every Fellow of a College is also, by Statute, elected with reference to his fitness to be a member not only of a place of education, but of a place of learning. Neibuhr used to call his pupils his wings: they would have been leaden wings if he had been required to drudge with them like a teacher of a common school. Nor would Newton have been what he was to England and the world if as a Professor at Cambridge he had been compelled to give four recitations a day and to eke out his income by travelling about to deliver public lectures besides. I do not claim for the ministers of learning and science great incomes: they above all men ought to cultivate simplicity of life: but the highest interests of civilization require that such of them as have shown superiority and devotion to their calling should be released from incessant and engrossing toil for daily bread. If it were only as the indispensable precursors of practical science, which cannot advance without the guidance of previous investigations unremunerative to the investigators, such professors would repay reasonable liberality many-fold. The prospect of a higher claim is also requisite as a stimulant to the ordinary teachers, whose calling must be otherwise somewhat hopeless, and being hopeless, will be apt to be somewhat lifeless.

I feel that in extending any remark to this country, I am dealing with a state of society with which I am unfamiliar: but

it seems to me that the function of a University as an institution in which every department of learning and science may be cultivated with the best means and appliances, and at once with the aids and with the salutary checks which the presence of the other departments affords, though secondary, is perhaps the clearest ground for founding such institutions at the present day. I do not know whether it is a dream, but I have sometimes thought that the free study of Theology at Universities, with Academical advantages and under Academical responsibilities, was as likely as anything to abridge the age of perplexity and doubt through which the world is struggling, not without danger to the moral foundations of the social fabric, towards a faith in which history and science shall be reconciled with religion.

I would submit to the Association that it is also desirable in organizing Universities always to provide for the more zealous and promising students the means of prolonging their residence at the Universities and carrying on their studies, perhaps as assistants to the Professors. It seems desirable that every Professor of Physical Science especially should have a certain number of superior pupils working under his directions, and training themselves for independent investigation. Hardly otherwise can a regular succession of duly qualified teachers be provided for the nation.

I would also submit that it is desirable to provide some individual superintendence for each student in his course of study, such as is provided by the tutorial system of the colleges in my own country. I may be prejudiced by English habits, but I have no great faith in the educational efficiency of public lectures. Often I suspect they lead the student to mistake mere mental excitement and amusement for the acquisition of knowledge, and rather indispose him to dry and severe study. Even coupled with recitations, I hardly think that without individual superintendence they afford a sufficient security for the real hard work which alone leads to any substantial results, which alone is worthy of the name of education.

There are one or two more points which I would just submit to the consideration of the meeting. If we are to have special departments, I would plead for a department of Political

Science. Not that I take a Chinese view of politics, or imagine that statesmen can be formed in a University without experience of the political world. But a thorough training in History, Political Philosophy, in the great principles of Jurisprudence and in Political Economy, including of course the history and statistics of national trade and production, could not fail to be beneficial, could not fail to assist in elevating the mere politician into the statesman. The world is beginning to discover that politics are not a matter of passion and declamation, but a science, and that it is only by treating them as a science that any results beyond the mere triumph of parties and the personal success of place-hunters, any results in fact beneficial to the community, are to be obtained. Not only the practical politician might derive benefit from such a department, but the journalist, the greatness of whose power and the importance of whose calling to the community have now become a rhetorical commonplace, and whose articles have in fact almost superseded the influence of Parliamentary and Congressional debate.

College discipline is another point to which I venture to think more serious and systematic attention ought to be turned. At Oxford the College is, or aims at being, a sort of family. The students both lodge and take their meals within the walls. Dinner they take in the College Hall, where the Fellows sit at the high table on a sort of dais, the students at tables in the body of the hall. The Tutors and such of the other Fellows as are resident, live and pass the night in the College, so that authority is always present. This system has great advantages, but it would scarcely be practicable without the rule, embodied in our mediæval statutes, which requires the Fellows to remain unmarried. The Colleges of Oxford and Cambridge are half monastic institutions, the growth of the Middle Ages, which, with certain modifications, may continue to exist on the soil where they grew, but would not bear transportation. On the other hand, the life of the German or French student living in lodgings under no effective discipline, is not satisfactory: I cannot help thinking that its evils are a heavy set-off against the intellectual fruits of education. The dormitory system in a College, in which the Tutors or Professors

themselves are not resident, seems to me the most untenable system of all; because it is at night, when the students are collected in the dormitories, that the most objectionable things are likely to take place. The discipline of adult students is under any system very difficult, especially if it is to be administered by Professors chosen, not for their qualities as disciplinarians, but for their qualities as teachers. Perhaps its importance may diminish if the system of special departments is adopted, because the student in a special department will have come for a very definite object, and will probably be pretty well occupied with that object during his residence. I watch with great interest and with considerable hope, the experiment which is being tried at the Cornell University, under, as it seems to me, very good auspices, of investing the discipline with a military character, appealing to the sense of military honor as its motive power, and placing it in the hands of a military man specially qualified for the office. I suspect this is the only effective discipline to which youths are likely to submit, especially in a democratic country, and in a country where the youth is so soon a man.

I look also with great interest on another experiment which is being tried in the same University, the combination of intellectual training with manual labor. Evidently this combination has its limits. The labor, not to interfere with the main object of the student's life, must be such as will serve in place of physical exercise, and even as relaxation from mental toil, and it must not draw too largely on the fund of nervous energy which supplies the hand and the brain alike. Within those limits I do not see why the experiment should not succeed, and if it has any measure of success, it will help to soften away the strict line of demarcation which at present divides the intellectual classes from those who labor with their hands. As a mode of enabling poor men to obtain a University education, it may be liable to some danger, unless a strict entrance examination is required as a proof that the youth possesses real aptitude for an intellectual calling, and is not brought to the University merely by a vague desire for a higher social position. It may seem a hard doctrine, but I confess that in elections to our Oxford Scholarships, I was always rather against giving preferences on

the ground of mere poverty. It seemed to me that if a poor man had intellectual power enough to sustain himself at the level to which he was raised by a University education, you did him and the community alike a service by raising him; but that if he had not, you did the reverse of a service, not only to the community, but to him. We want a philosophy which shall practically convince us that all callings which are equally useful to society, are equal, and that all honest workers, intellectual or manual, will receive equal wages from the author of society in the sum of things. The sole reason for interfering to take a man out of his calling, ought to be that he is able to do more for society in a different calling. The happiness of a class is not increased, nor is its condition rendered more just by taking a few men out of it; on the contrary, it may be made unhappy by being filled with restlessness and discontent.

Perhaps the general survey of the subject which I have attempted to take, would hardly be complete if I left unnoticed the question which has been raised in my own country as well as here, as to the expediency of extending University education to women. It is a question which we ought to approach in the most liberal and unprejudiced spirit, but at the same time with caution, because a false step in anything affecting the family, is more serious than any error in politics. On one point my mind was pretty well made up. I felt that, unless physiology should give us new light as to the relations between the two sexes with respect to their power of enduring labor and their nervous sensibility, I could not be induced to be a party to any plan for submitting women to the severe strain of our competitive examinations. The system was trying enough, and its efforts questionable enough when it was applied to men. For the rest, it seems obvious that the general education of a class or sex must be regulated, not with reference to exceptional cases, but with reference to the normal destination of its members in life; and the normal destination of a woman in life is to be a wife and mother, supported while she performs her conjugal and maternal duties by the labor of her partner's brain and hands. We have to decide first, whether the same Academical education suits both men and women, and secondly, whether it is desirable that they should receive it in the same Universities.

These problems ought to be solved separately, and in their natural order. Vassar College is trying the first experiment, it would seem, in the fullest and most satisfactory manner, not only for this country, but for all. It is surely reasonable to await the result before proceeding to the second experiment. The fact that the movement in favor of the admission of women to Universities is simultaneous, and to some extent connected, with the political movement called the Woman's Rights movement, would lead us, without passing any judgment on the political question, to be more scrupulous in applying to the educational question the experimental test.*

To solve all these problems and place University education on a sound basis, education will have need of chiefs capable of watching the currents, satisfying the exigencies, tempering the propensities of their time.

I have now brought the chief points which occurred to me, under the notice of the Association. I have frankly stated my own misgivings and perplexities; but in so doing, I trust that I have not done anything alien to the spirit of a society professing to be scientific, and formed, not for the advocacy of opinions, but for the discovery of truth.

GOLDWIN SMITH.

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* I am speaking merely of the proposal to extend to women the system of male University education. No one doubts the necessity of greatly improving female education.

THE TEXAS CATTLE DISEASE.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION AT ALBANY, NEW YORK, FEBRUARY 18th, 1869.

I. CONSUMPTION OF BEEF.

France consumes, annually, nine hundred and ten thousand tons of beef; England consumes one million four hundred and sixty thousands of tons; the United States consume two millions of tons. Very few of us really grasp the idea involved in the word "one million;" to most it is a noun of multitude, and that is all. If we conceive of a heap of one million pieces of meat each weighing a pound, it would take a man twenty-three days to distribute them, if he worked steadily for twelve hours in the day, and gave out one piece every second of time during the whole period. Remember, I have been speaking of one million of *pounds*. There are four thousand millions of pounds in two millions of tons. It would take a man, who distributed at the rate of one pound each second of time, and worked without intermission twelve hours a day, ninety-two thousand days, or two hundred and fifty-two years to distribute this mass of meat.

The United States had between twenty-five and twenty-six millions of cattle when the rebellion broke out, the value of which in round numbers was one thousand millions of dollars. Texas had three millions of cattle; and contrary to what is usually supposed, they did not diminish during the civil war, but they in fact multiplied enormously. There are now twelve millions of cattle feeding on the broad grass lands of Texas.

In the year 1866, two millions and sixty-two thousand eight hundred animals (including sheep and swine,) were slaughtered in the single city of New York, valued at over thirty-three millions of dollars.

Mr. Lewis F. Allen, in his very excellent work on cattle, gives some estimates respecting the amount of cattle consumed

in the United States. These estimates are all too small, but we will adopt them for that very reason. For our purpose we prefer an under-estimate to the real truth; we can comprehend it better. He assumes that New York takes about three hundred and twelve thousand head of beef cattle annually; that the cities of Philadelphia and Baltimore consume about as much more; that the seaboard cities of New England will use up a similar number; that the Southern seaboard cities, including the cities on the Mississippi accessible to sea-going steamers, will require as many more. These four groups of cities will then consume, in round numbers, twelve hundred thousand cattle. These cities in the aggregate contain about one-tenth of the population of the country. It would not therefore be a very violent assumption, if we should say, that the remaining nine-tenths of the population consumed ten times as much beef as the other tenth; but we will content ourselves with a much more modest estimate. We will only assume that they eat *three* times as much. Then the consumption of the country will sum up five million head of cattle. If we place these five millions of animals eight abreast, the line would extend from the city of New York along the Hudson River, New York Central and Lake Shore railroads to Chicago without a break. Measured by money they are worth three hundred millions of dollars, which far exceeds our whole internal revenue.

One of the first ideas that will occur to us after we have in some measure mastered the magnitude of the meat question is: How is this vast aggregate diffused among the individual consumers? This is indeed a question of no slight significance. Meat is a perishable article; if there is an oversupply, it will be wasted; if there is an undersupply, there will be a most provoking dislocation of our domestic arrangements. In fact, there is never too much and never too little. We never exercise any forecast or provision about our dinners. If we have got money in our pockets, we are perfectly certain that just such a steak or a roasting piece, as we want, is lying all ready for us at our butchers. Some subtle, latent law of supply seems to extend through all the ramifications of produc-

tion and distribution, which gives us just enough and none to spare, without any intervention of the legislature.

The legislature indeed should never approach the cattle question heedlessly or hastily. We cannot contemplate the subject without being struck with the multiplicity and complexity of the interests involved in the production and distribution of beef. The breeder, the grazier, the drover, the middle-man, the butcher, the railroad corporation, the tanner, the comb maker, the Prussian blue maker, the sugar-refiner, the maker of neat's-foot oil, and many others, are all deeply interested in the matter. We cannot touch the cattle question at any point, without rousing up a host of interests, which we never dreamed of before as having any kind of connection with it.

II. COST OF BEEF.

Next to an abundant and uniform supply of good beef, we are most interested in its cheapness. At the present time the best steaks and roasting pieces cost to the consumer from thirty to forty cents a pound. Very few animals are sold alive in the New York market for less than one hundred dollars. In Texas, cattle weighing one thousand pounds can be bought in any quantities at eight dollars a head, as we have been assured by many of the most reliable men residing in that State.

Mr. McCoy, the proprietor of the great cattle depot in Kansas, gave me the following statement, which was confirmed by several very intelligent drovers:

Cost per head in Texas,	$10.00,	(this is $2.00 higher than the present price.)
Driving to Abilene, . . .	2.00	
Car expenses to New York,	9.50	
Feed bill at Stations,. . .	1.50	
To pay shipper, ...	.50	
Cost per head in New York,	$23.50	

Sixteen dollars and a half on each animal, is as large a profit as any drover would expect to make. This would make the cost of the animal in New York forty dollars, with an ample profit for all the parties concerned. Why then are the butchers of New York compelled to pay an advance of sixty dollars on

this price? The answer to this question is of great importance, and will be very instructive in many ways.

We do not hesitate to assert, that the main cause of this enhanced price is to be found in the reckless cruelty, which is practised towards the animals from the time they leave Texas until they arrive in New York. The difference between the amount actually paid for animals in that city, and the amount for which they might very easily be afforded, may be described as a pecuniary expression of the penalty for the violation of the Divine law.

III. THE TEXAS CATTLE DISEASE.

This disease, though new in the State of New York and in the New England States, when it made its appearance in 1868, was by no means a new thing at the West, having been known there since 1854, when the Texas cattle were first brought into Illinois. At that early day the Texas cattle themselves were to all appearances quite well, but the native cattle that grazed on the same pastures, or that drank at the same streams, or that travelled over the same roads, contracted disease, and great numbers of them died. In the year 1860, the outbreak of the rebellion effectually stopped the Texas cattle trade, and with it the disease also ceased. In 1868 the trade was again actively reopened, and again the disease made its appearance.

In the early part of August in that year, a very peculiar diarrhœa and dysentery appeared, mostly among laboring men and mechanics and their families in New York. The usual remedies seemed to have no effect, and many died. While the physicians were thus baffled, it came to the knowledge of the Board of Health that a large number of cattle were sick at Communipaw with a severe, but unknown disease. Dr. Harris, the Registrar of the Board of Health, who had ample opportunities to study the yellow fever, and who, as Health Officer of the Port of New York, had seen and studied every form of malignant disease, went over to Communipaw with a full staff of assistants, and made a very thorough examination of the sick cattle. He saw at once that it was a disease unknown to veterinary science, having a very striking analogy with yellow fever as manifested in the human subject. In view of the facts

which were reported by Dr. Harris, the New York Board of Health ordered, that all meat coming into the city should be inspected before being offered for sale, and the police were specially enjoined to enforce the order. They also authorized Dr. Harris to take all the necessary measures for ascertaining the nature of the disease and the best methods of securing exemption from its ravages. Dr. Harris, with admirable sagacity and foresight, immediately organized a system for ascertaining the history and pathology of the disease, and its relation to human disorders. Dr. Stiles was assigned to the microscopic department. Dr. M. Morris to the pathological department, and Dr. Chandler to the chemical department. The joint labors of these gentlemen have been very successful, and have cast the fullest light upon what was previously the least known disorder. Their investigations show clearly that the study of epizooties is very important.

I will now endeavor to sketch the disease as it appears:

1. *External Symptoms.*—The diseased animals stand apart from the herd. The feet are drawn up together under the body. The back is arched, and the animal makes frequent, and generally ineffectual, attempts to defœcate. The gait is staggering, as if from paralysis of the hinder extremities. The head hangs down below the level of the back. The eyes have a stupid, staring expression, sometimes protruding from their sockets. The dung is at times hard, at times fluid. Both diarrhœa and constipation are habitual symptoms. The urine, often totally suppressed, is generally of a dark red color. There is a gamy odor, strongest about the region of the flank. The animals are very thirsty, and generally eat dry food to the very last moment. They rarely loose their cud. The normal pulse of a bullock is about forty beats in a minute. In this disease it reaches to one hundred and twenty, but the strokes are weak and tremulous. There is often a frothy drool from the corners of the mouth, to be distinguished from the healthy drool by the air vesicles, with which it is filled. The temperature of the rectum in healthy animals is between 98° and 100° F. In this disease it sometimes rises to 110° F. If any animal indicates a temperature over 106° F., it has never been known to recover. If the temperature exceeds 102° in connection with

any two or three of the preceding symptoms, we may establish our diagnosis with certainty and pronounce it the Texas cattle disease. There is often a good deal of muscular twitching, (*sub sultus tendinum*,) especially in the flank. The coat is generally rough and staring. The animal gets up and lies down frequently, and gives other indications of uneasiness. In milch cows the milk dries up rapidly.

These symptoms are by no means invariable, presenting themselves sometimes together and sometimes separately; but we always observe the staggering gait, the rapid pulse, the high temperature of the rectum, the hanging head, and in milch cows the disappearance of the milk. These symptoms develop themselves *per saltum*. The first appearance of the disease is its last stage. At the West it passes more gradually through its successive stages.

2. *Post Mortem Appearances.* — When the sick animal is killed and eviscerated, the meat is of a dark mahogany brown, and the fat is of a greenish yellow color. Sometimes when the disease has been lingering, the meat has a reddish appearance, somewhat like the pigment known as Spanish brown. The muscular tissue on being cut into, is found full of serum, and it exhales a sickish odor. The disease impresses its sign-manual so clearly upon the meat, that no one needs to mistake it.

The liver is usually much enlarged with fatty degeneration. The average weight of a healthy bullock's liver is twelve pounds; in this disease we often find it weighing from fifteen to twenty pounds. Dark blood often oozes from it, when cut into.

The gall bladder is greatly distended in most cases with thick flaky bile. There are often as much as six gills of this fluid found in the bladder.

The spleen is much discolored on the exterior surface. It is very dark and mottled like old Castile-soap, but darker. Sometimes it is found tinged with yellow, blue and purple. On being cut into, it is quite black, and a dark fluid exudes from it in considerable quantity. It is enormously enlarged. The average weight of the spleen in a healthy animal, is one pound and a half; in sick animals, often from five to six pounds.

The rumen or paunch, or first stomach, rarely shows any signs of disease, except that the temperature of its contents is much raised.

The reticulum, honey comb, or second stomach, has shown no marks of disease in any of the animals that I have examined.

The omasum, manyplas, or third stomach, generally shows marked indications of the disease. Its leaves are hot and dry, with inflamed patches here and there upon its interior surface; the epithelium is easily rubbed off by the finger; sometimes the film of food on the leaves is dry and stands upon the surface, divided into round cakes, looking like gun wads, which cannot be detached without bringing the epithelium along with it.

The abomasum, rennet, or fourth stomach, shows the most characteristic marks of the disease. The folds of the upper part of this stomach are always more or less congested, and the tops of the ridges occasionally abraded, the abrasions being filled with clots of blood. The lower or follicular portion of this stomach is much redder than in health, and is the seat of ulcers, varying in size from a grain of wheat to two inches in diameter. These ulcers eat down through the epithelium and mucous coat. I have seen the lowest or muscular coat of the stomach very much corroded, but have never seen it entirely perforated. When the animal is convalescent, lymph is deposited around the edges of the ulcer, which becomes gradually organized. Successive rings of lymph are deposited centripetally until the depression is entirely filled. The appearance of the surface which has been thus supplied, is unlike the original, not being covered with follicles, but is smooth, and not of a drab color, but reddish. It never seems to form a true digesting surface.

The ileum shows red points, which are collected into red bands round its interior surface.

The coecum is deeply injected at the bottom, and the epithelium is softened throughout.

The rectum has longitudinal inflamed stripes, which on being examined with a lens are found to be caused by minute red spots. There are usually eight of these stripes situated on the highest ridges of the rugae. Near its termination the circumference of the rectum shows marks of inflammation.

The kidneys are very dark externally, congested, mottled and much engorged. The cortical tissue is found to be softened and breaks down readily under the finger; bloody puncta are found all over the interior.

The brain varies much in appearance; sometimes the vessels of its surface and the investing membranes are very much engorged, sometimes its entire substance is congested, sometimes it is softened throughout, sometimes the softening is confined to the base of the brain.

The Heart, Lungs, Trachea and Pancreas are generally found in a healthy condition.

Having thus defined the symptoms of the disease, let us proceed to inquire into the cause of it.

When Dr. Stiles first applied his microscope to the blood of diseased cattle, he perceived that the corpuscles were not round and entire as they appear in health, but crenated more or less, and giving unmistakable evidences of disintegration. Subsequently he discovered minute black dots in abundance floating in the blood, the bile and the urine; next he ascertained that these dots were the spores of some fungus, which he saw germinating in the form of cells, at first non-nucleate, afterwards nucleated.

No animal having the Texas cattle disease was ever found without these spores, which would lead us to suppose that their presence was the cause of the disease, were they not also found in animals in perfect health.

By transferring a cell to the cut surface of an apple, or potato, or a piece of fresh bread, we see it attain to its full development, and produce spores identical with those found floating in the fluids of the diseased animal. It is a cryptogam, and has been found by Dr. Harris to be a *Tilesia caries*.

It is now tolerably well ascertained that the cattle disease has two factors. One is the spore of *Tilesia caries*, which may exist in great abundance for any length of time, without working injury if the other is not present. This is a certain morbid condition. Whenever the animal having these spores becomes feverish or suffers from indigestion, the spores begin to germinate and to increase in bulk. If they show this increase, they must obviously obtain the matter from without, from the *blood corpuscles*, which, as the microscope has shown, are destroyed by the progress of the disease. The spores then grow at the expense of the blood, sucking out its vitality. Deprived of their supply from the blood, the tissues turn elsewhere. A series of chemical transformations begin, and ulcerations, congestions,

inflammations, fatty degenerations occur all over the body. Dr. Chandler's experiments show conclusively that during the progress of the disease, the relative amount of water in the blood is constantly on the increase, while the blood globules, the albumen, and all the nutritive elements of the blood as constantly decrease. If the spores continue to germinate, the animal dies from a lack of nutrition from the blood. If the germination is arrested, the animal recovers. The Texas cattle disease is therefore a *disease of the blood.*

There are two routes by which the Texas cattle are brought to their feeding grounds in the Western States. One is along the Bayous of the Red River country to the Mississippi River, from whence they are transported to Cairo by steamboats. The other is by way of Abilene in Kansas, eight miles west of Fort Riley. The cattle thus transported are driven for the most part through Cook County which lies on the northern line of the State, and they are compelled to make a detour of about one hundred and fifty miles to the right, through the Indian Territory, in order to avoid the predatory tribes of Indians that infest the straight road, and to avail themselves of the protection of Forts Towson and Gibson. On the first of these routes the cattle suffer much for want of food and drink. There is no grass for a great part of the way, and the coarse herbage alone found there, is vitiated by the resinous droppings of the trees. Water too is scarce, and when found is putrid and disgusting. The cattle are driven by their heartless drovers without mercy, many dying upon the road, and such as arrive on the Mississippi being in the most miserable condition. The half famished beasts, driven or dragged on board the boats, are rarely supplied with food and water until they arrive at Cairo. We have here all the conditions for the production of the Texas cattle disease. The animals bring the spores in their bodies from the feeding grounds of Texas. The privations of food and water, and the cruel treatment, bring on gastritis and fever, which, as we have seen, furnish the proper soil for the spores to germinate in. Every post mortem examination of these animals at the expiration of their journey has revealed the presence of this disease. When landed at Cairo, the cattle have decreased so much in weight since leaving Texas, that they must remain on

the Western feeding grounds about a year to recover their lost flesh. We now begin to see why the butchers of New York must pay one hundred dollars a head for cattle, when the cost of delivering them there, if properly treated, is only forty dollars. We must add to the cost, the price of repairing the damages which the cruelty of the drover has inflicted upon them, and when we find that it requires a whole season's feeding to repair the damage, we can readily see that the cost price of the animal will be greatly increased.

But this is not all. These Texan bullocks carry disease to the native cattle along their route. During the past season, out of four thousand native cattle in and around Tolono, Ill., all but two hundred and fifty died of the disease communicated by Texas cattle. Dr. Jones, of Tippecanoe County, Indiana, bought a drove of one hundred Texas bullocks brought by the way of Cairo, and put them with his own herd about the 1st of July, 1868. In three weeks his own herd began to sicken and die of the Texas disease, and he lost one hundred and twenty-four out of one hundred and sixty bullocks. This is an example of the severe losses suffered by western graziers from the Texas cattle disease, — all of which might be avoided if the cattle were transported with humanity from Texas to Cairo.

It may be asked, why it is that the native cattle mostly all die from the disease, while the Texas cattle mostly all recover from it, though many do not. The Texas cattle are a wild race, of which the sickly and weakly die young, and none but the hardy and vigorous attain to maturity, which accounts for their greater resistance to the disease.

The cattle brought by the way of Abilene arrive in better condition than those brought via Cairo, as there is an abundant supply of nutritious grass along the route, and water is also more abundant and of much better quality, but there is a great deal of cruelty on the way. The rude Texan drovers tell us in their rough phrase that "they give 'em hell the two first days," which they explain by saying that they drive them ninety miles during that period, which is four times as far as they ought to be driven. Then the animals give out, no yells nor blows, nor pricking with pointed goads being able to push them forward.

The cattle disease now seizes them, for the rest of the distance their progress is slower, and when they arrive at Abilene, they weigh from two to three hundred pounds less than when they started from Texas. In consequence of this weakness and loss of weight, they are obliged to remain there some time before going to their feeding grounds; this is an addition to the cost not included in Mr. McCoy's estimate. Post mortem examinations of cattle coming by Abilene, show that nearly all have had the disease; but they do not communicate it to native cattle as much as those coming from Cairo. It was for a long time supposed that none but Texas cattle could communicate the disease; but it is now fully demonstrated that native cattle can, and do communicate it to each other.

The Texas cattle disease enhances the price of beef to the consumer in another way. An animal may be looked upon as a machine for converting grass and hay into meat and fat. It does this in the cheapest manner when all its organs are adjusted to each other, and in the dearest, when they are disturbed, as in this disease. I saw an admirable illustration of this at Providence, R. I. A car load of sick cattle was brought there early in September, several of them died, some were slaughtered, ten were turned into a quarantine yard having access to a salt marsh. I saw them towards the last of the month when they were all convalescent; in about four weeks afterwards they appeared well and the owner began to feed them for the market. From that time they were supplied with as much nutritious food as they would eat. A letter from Dr. Snow, written in January, says that they were not then fit for the market. The reason is plain. So large a part of the digestive surface of the fourth stomach was destroyed by ulceration, that there was only enough left to supply the waste of the system, and not enough to supply additions to the fat and the muscles, a large proportion of their food being undigested and lost in the dungheap. The fourth stomach or abomasum is well known as the true digestive organ in which all the chemical changes are effected.

The price of cattle is enhanced in New York by cruelty in another form. Western feeders generally concur in the statement that they give on an average one hundred bushels of

shelled corn to each bullock during the winter, without increasing his weight by a single pound. A foreman who fatted nine thousand head of cattle in the winter of 1867–8, assured me that the above amount was consumed on an average without any gain of weight.

Farmers in New York, Pennsylvania and New England, know from experience that for every ten pounds of corn given to a bullock, they can add one pound of flesh to the animal. The six thousand pounds of corn fed to these Illinois cattle ought to have added six hundred pounds of meat to each animal, but it did not add a single pound. Let us call the loss three hundred pounds, which will be very far within bounds; even then, the loss from this source on the three hundred and twelve thousand head of cattle consumed in the City of New York, would amount in the aggregate, to ninety three millions six hundred thousand pounds of beef. The western drovers will not carry on their business at a loss. If they waste six thousand pounds of corn on each bullock, they make the New York consumer pay for it. This one item will account for a considerable proportion of the sixty dollars a head that we are looking after.

Now why is it that the New York farmer can get one pound of meat for every ten pounds of corn, while the western farmer gets nothing?

The answer is that the former makes his bullock comfortable, the latter makes his miserable. The former furnishes his fattening animal with a warm shed, a soft bed, plenty of food and water at regular intervals, freedom from disturbance by other animals, from frights, and from all unnecessary labor. The latter leaves his animal beneath the open sky, subjects him to snow, rains and the howling blast; gives him no bed but the earth, never cards his coat, throws his corn into the mud, and compels him to grind it for himself, to fight with other cattle for every mouthfull of food, and in many cases to travel a mile or two for his water. The forfeiture of these three hundred or six hundred pounds of beef is the penalty which God exacts for violating His laws.

An animal never appropriates any of its food to the formation of flesh and fat until he has first applied it to all the purposes of the animal economy. If the temperature of an animal falls

below 92° F. he dies from inanition; if it exceeds 108° he dies from febrile vitality. He must maintain his temperature at some point intermediate between these two extremes or he must perish. If it requires all the carbon in his food to keep his temperature at 98° F., he obviously has none to spare for the formation of fat. If by shelter we prevent the radiation of half the heat which he dissipates without shelter, then half the carbon which he was obliged to expend in the formation of heat may be expended in the formation of fat. Every muscular motion, whether expended in grinding his corn, in walking for his water, or in fighting for his food, causes a waste of muscular tissue, which must be repaired by the food, and no addition to the tissue can be deposited until these repairs are made. If we economize this muscular force by utilizing the prairie winds and compelling them to grind the food of the ox; if we protect him from the attacks of other cattle; if we convey his food and water to him, we enable him to apply a much larger proportion of his albuminous food to the formation of new muscular tissue, and thus increase the supply of his most valuable parts.

There is still another form of cruelty to animals, which enhances the price of beef to the consumer. This is the inhuman manner, in which they are transported to New York from the feeding grounds of the West. This journey occupies about four days, and during this period they lose upon an average one hundred pounds apiece. When transported with decent humanity they lose but twenty pounds. Here is a loss of eighty pounds per head which is due solely to downright brutality. The aggregate of this loss on the three hundred and twelve thousand head consumed in New York, is twenty-four millions nine hundred and sixty thousand pounds. In other words, New York pays for this amount of meat, but never gets it.

To understand what is done to these poor animals, you must see it, and hear it for yourselves. I have not the graphic skill to delineate it. The yells, like those of a ferocious mob, the heavy blows, the pricking with spears, the multiplication of tortures to get them into the cars, cannot be described. Once packed in, half wild with terror, scorching under the blazing sun of summer, they are dragged on for twenty-four hours, before they are allowed to taste a mouthful of food, or drink a

drop of water. Could a fiend invent a more ingenious or a more acute system of torture? After a brief rest, they are hurried on the cars again to undergo a similar routine of suffering. This is the best treatment that they receive. If the market suddenly rises, the telegraph sends orders to the West to push on the cattle with the utmost speed before the price goes down. Then there is no rest for them, no food, no water for four long days. It is not wonderful, that this should strip a hundred pounds of meat from their bones.

I think we shall now have little difficulty in understanding why beef costs sixty dollars more per head in New York than it ought to do. First there are the cruelties inflicted on their passage from Texas to Cairo, which takes off from two to five hundred pounds in weight. Then the disease, born of these cruelties, impairs the digestive functions so that restoration of the lost flesh is effected at great cost. Then comes the further waste arising from the exposure to cold and storms, from careless feeding, and finally from the sufferings of the transit to New York. These causes taken together, are amply sufficient to account for the enhanced price of the bullocks in the City of New York.

We have already said that the consumption of meat, tainted with the Texas cattle disease, caused an outbreak of a most dangerous form of diarrhœa in New York. So much is clear. But are we entitled to assert that diseased meat will *always* cause disease under all circumstances? Is it certain that the meat, which caused disease in August, will cause disease in December? These important questions have never received proper attention from scientific men, and we cannot answer them positively.

I have not a shadow of doubt, (although I have no proof to offer in confirmation of my opinion,) that very many obscure diseases, whose origin baffles the most acute scrutiny of physicians, have their origin in the eating of diseased meat. Every animal that is killed after travelling four days on railroad cars without food or water, is in a diseased condition, the marks of gastritis and inflammation are perfectly plain. Meat eaten in this condition is very likely to cause disease in those who partake of it, and especially in those who are constitutionally weak and predisposed to sickness.

Together with my colleagues in the cattle commission, I have visited a great number of the largest slaughter-houses in our great cities, including the best and the worst. I can testify from my own observation, that a great many cattle with various marks of disease, are sent to the markets and sold as choice beef. The butchers, I fear, have no idea that good looking meat is any the worse for having encased a diseased liver or a degenerated kidney or inflamed bowels.

Nearly every week an ox suffering with a cancer, passes through Buffalo on its way to our markets. I do not know that every one who eats the meat thus filled with cancer cells, will have a cancer, but I think there are few who would knowingly take the risk. It certainly does not seem right that men and women should be exposed to so great a danger unwittingly. They ought at least to be warned of their peril, and determine for themselves whether they will take the risk or not.

Scarcely a single cattle train comes into Buffalo or Albany, especially in the summer season, without one or more bullocks dead or dying. There is always a low class of butchers at the stations to buy these dead cattle; they sell them, of course, and their customers eat them. Such food cannot be eaten with impunity.

One word more, and I will trespass upon your patience no longer.

If we obtain the average price of wheat for a century, as we may do from the records of Hospitals and other public institutions, arranging the price for each year in a tabular form, and in the next column we place the number of marriages, and in the next the number of illegitimate births, and in the next the number of crimes that have been committed during each year, the relation of these subjects will at once appear. We shall see that as the number of marriages increases, the price of wheat decreases; and as the price of wheat increases the number of marriages decreases; and as marriages decrease, illegitimate births and crimes increase. Because beef also is food, it also exercises the same controlling influence over the social state. The present high price of beef is productive of many evils, moral as well as material, which cannot be removed while it continues. Here is room for earnest effort. The facts, that we

have stated, should be deeply pondered by the Philanthropist, the Statesman and the Christian.

Professor Gamgee has invented a process, by which meat may be transported any distance and kept for any length of time without injury. I have tasted mutton preserved by his process three months after it had been killed. It was very good wholesome meat. It is said, that simply dipping meat in a solution of sulphate of lime will preserve the meat fresh and sweet for months. If this is true, it is a much simpler and cheaper method than Professor Gamgee's. During the last summer a refrigerator car ran between St. Louis and Providence, bringing peaches, grapes, fresh beef and mutton from St. Louis. Returning it carried fresh fish to St. Louis. By resorting to either of these three methods, cattle may be killed in Texas and transported to the Atlantic seaboard without any cruelty and without any loss.

A car has recently been built in which cattle may be transported alive without crowding and in perfect comfort, fitted up with feeding and watering troughs.

A Convention of Cattle Commissioners and others interested in the cattle trade, assembled at Springfield, Illinois, in December last, and agreed on a series of propositions which the Commissioners from the several States were directed to embody in the form of laws to be submitted to their several legislatures. It remains to be seen if these measures can be brought into successful operation.

JOHN STANTON GOULD.

THE SUPERVISION OF PUBLIC CHARITIES.

A PAPER READ AT THE GENERAL MEETING OF THE AMERICAN SOCIAL SCIENCE ASSOCIATION, ALBANY, FEBRUARY 18th, 1839.

In a lifetime so short as ours, some things must be taken for granted. I shall, therefore, with your permission, assume that there is an occasion, a justification, and even a necessity for public charity. I know that this has been denied, and is still called in question by some, who maintain that for the public to assume the support of the poor, and the relief or improvement of suffering humanity, is to diminish the natural humane sentiment in the heart of relatives, friends, neighbors, and the community generally; while at the same time, it increases the number and the helplessness of those who demand relief. Without stopping to refute this argument which contains a certain element of truth, it is only necessary to say that we have established, whether wisely or unwisely, a far-reaching system of public charity, which cannot at once be abandoned, even if all men were agreed that it ought to be; and which needs all the more, if these assumptions are correct, a careful, comprehensive, and wise supervision. Indeed, the first step towards abolishing the necessity for public, legalized charity, would be its closer investigation and oversight, by which alone can be found the means and opportunity of reducing it to a minimum. There can be no dispute then, between those who favor, and those who distrust, the relief of the poor at public expense, as to the propriety of seeing how that relief is applied.

It is precisely here, however, that the public activity generally fails, and it is in the supervision of charities, and their combination into a harmonious system, that all governments, and, in particular, our own, are apt to be defective. Hence arises mischief of two opposite kinds, yet often coexisting in the same locality. The poor are lavishly, and yet defectively

supplied with what they need, and their temporary condition of pauperism is allowed to become a permanent one. This is the great plague of England, and it is this which has brought her poor-laws into such disgrace with those two extremes of the literary class, — novelists and political economists. When Dickens, Ruskin and Mill unite in censuring them, it is fair to conclude that something must be wrong; and though, in this particular instance, there is much that needs to be corrected besides the system of supervision, it is very plain that this also must be defective, in spite of all its array of boards and commissions, inspectors, guardians and overseers. The same is true in the United States. While we are in little danger of speedily falling into the slough of pauperism, where England has been struggling for centuries, we are running the risk of a condition so far approximating to hers as our greater freedom and opportunity of self-support will allow. With labor in constant demand, land cheap, and every career open to every person, we have the three greatest securities against pauperism; but these alone are insufficient, as the experience of our great cities, the present winter, has abundantly shown. We need, moreover, the constant activity of judicious and far-reaching charity, public and private, and we cannot have this without vigilant supervision.

As a matter of fact, the expenditure of money for charities is already very large in the older Northern States, particularly in New York and Massachusetts. I cannot give you the amount for the great State of New York, but that will be accurately given, I doubt not, in the forthcoming report of Dr. Hoyt, the efficient Secretary of the New York Board of State Charities. Having held a corresponding position in Massachusetts from 1863 to 1868, I can present some facts in regard to that State, which may interest this Association.

The population of Massachusetts, by the census of 1865, was nearly one million three hundred thousand; it now considerably exceeds that, and in 1870 will probably have increased to nearly a million and a half. The amount of money expended last year by the public for the support and relief of the poor, the support of prisoners and the reformation of young offenders, was not less than one million six hundred thousand dollars, or

more than a dollar for each inhabitant. Of this amount, eight hundred thousand dollars, in round numbers, was expended by the three hundred and thirty-five towns and cities; about three hundred thousand dollars by the fourteen counties, and about half a million by the State itself. If to this is added the further sum of nine hundred thousand dollars, paid by the State in the form of aid to disabled soldiers and the families of those killed in the late war, we shall have an expenditure of two million five hundred thousand dollars in charitable ways under the direction of public officers. The annual amount of private charities, distributed by organized bodies within the State, including the churches, is quite one million five hundred thousand dollars more, giving a total of four million dollars expended in this way in one small State,—an average expense to each inhabitant of three dollars. This estimate is certainly below the actual expense.

If this proportion were maintained throughout the United States, with its population of forty millions, we should have a yearly budget of one hundred and twenty-five million dollars for the expenses of charitable and correctional institutions, public and private; or more than twice as much as the whole civil service of the country costs, and more than the whole expenses of the National Government were, ten years ago. But it is only in a few States that so much is expended in proportion to the population; in New York probably quite as much, and in Pennsylvania nearly as much. Allowing a reduction of one-half in the ratio of Massachusetts and New York, we shall find the aggregate expenditure of the country to be at least sixty million dollars in the directions of which I am speaking; and of this sum, probably forty million dollars is disbursed by public officers, either of the nation, the States, the counties, or the municipalities. Here, then, we have a yearly tax of a dollar a piece, in whose expenditure we ought to be doubly interested, both with regard to what we pay, and to what benefit the recipients derive from it.

Do these figures seem large? Then consider, if you please, that the single city of London is stated on good authority, to expend yearly from thirty million to forty million dollars in charity, among a population of three million. Mr. Thomas

Beggs, in a paper read before the British Social Science Association, not long since, even estimates the expenditure in London as high as forty-five million dollars, of which, he thinks, at least half is thrown away, for want of careful supervision under a good system. In this, very likely he exaggerates, but it is no exaggeration to say that there, and here, a tenth part of the whole sum laid out is annually wasted, and worse than wasted, for lack of wise management. That is to say, a thorough and efficient supervision of public charities in the United States would save us at least four million dollars a year. And, although there is reason to believe that the charitable funds of Massachusetts are expended less wastefully than those of most communities, I do not hesitate to say that of the two million five hundred thousand dollars which I have shown to be expended there for poor persons, prisoners, and the dependent classes generally, at least two hundred and fifty thousand could be annually saved and the beneficiaries be the better for it. I cannot speak for New York, but I dare say there are gentlemen here, familiar with the subject, who would make similar statements about your public charities, which, including your prisons, must occasion a net expenditure of some six or seven millions, annually.

It may be deemed singular that prisons should be included among charitable institutions; and it is true that they are often managed with very little infusion of Heavenly or of earthly charity. But the modern theory of prison discipline makes them purely charitable in their results, though penal and repressive in the means employed; for they are now treated, in law, if not in fact, as moral hospitals, where the vicious are to be reformed, and by which society is to be purified as well as protected. The seclusion of the convict is like that of the small-pox patient, — for his own good, no less than for that of the community. But there is another, and a sufficient reason for reckoning prisons among the apparatus of public charity, and it is this, — that convicts, almost without exception, belong to the dependent classes. Not to shock you with a violent paradox, for we do not generally look upon the burglar and the murderer in the same light as the beggar — let me explain what I mean, by a few illustrations.

The property valuation of Massachusetts, just published by my good friend Mr. Warner, the Secretary of State, is between twelve and thirteen hundred millions of dollars, ($1,220,000,000,) which allows to each person, not actually supported or relieved by charity, an average property of about one thousand dollars. Now, in framing the questions to be answered by prisoners, five years ago, I inserted one to ascertain how many of them had ever come up to that normal standard of wealth in Massachusetts. Out of more than forty-seven thousand five hundred, of whom the question has since been asked, only about two thousand one hundred, or one in *twenty-four*, have been found who had ever owned property to the value of one thousand dollars. That is to say, ninety-five out of every one hundred persons committed to prison in Massachusetts, have never come up to the par value of a human being in that State — if we call that a thousand dollars. Moreover, we know, as a matter of fact that hundreds and thousands of our prisoners have been, or will become paupers, and our laws provide that, even in prison, they shall be supported from the poor rates, if their labor does not support them. As a third test, take this, — that, out of eleven thousand two hundred and thirty persons committed to county prisons in Massachusetts last year, three thousand six hundred and fifty, or a third part, could neither read nor write, in a community where the saying of Dogberry is eminently true, — that "to be a well favored man is the gift of fortune, but to write and read comes by nature."

If, then, we may assume that the unfortunate and the vicious are to be classed together, as objects of Public Charity, we shall find that the classification has a practical value when we come to speak of the details of its supervision. In a great State like New York — an empire in itself — it may be expedient to provide, as your new Constitution does, and as your practice has been, that the prisons shall be under the oversight of one set of public officers — one Board — and the charitable institutions of the State under that of another Board, and that counties and cities and smaller municipalities shall have their own independent Boards. But in Massachusetts, and in most of our States, it is equally expedient that this division should not take place, and that all the interests of Public Charity and

correction should be guided by one system and one administration. I do not know that this has yet been done in any State, though we tend towards it in Massachusetts; but a bill is now pending in the Rhode Island Legislature, which provides precisely this single-headed supervision. It will probably be adopted, and, if found to work well in that small State, will be copied elsewhere. Its main idea is borrowed from the Massachusetts system, which, however, has been simplified in the proposed measure. And since Massachusetts was the first State to adopt a general plan of supervision for its public charities and prisons, I may be pardoned for dwelling a few moments on the history and working of its Board of State Charities, with which, as already stated, I had the honor to be connected as Secretary, from October, 1863, to November, 1868.

As some of my hearers may be aware, Massachusetts differs from most of her sister States in having maintained, for nearly two centuries, a distinct class of State poor. For a hundred years before Concord fight, (which virtually made her a State,) the province of Massachusetts had paid from her public treasury for the support of poor persons not having a legal settlement in any town. This custom began about 1675, at the time of King Philip's war, when many families were driven from their homes by the Indians, and were supported in other towns, too poor to defray the whole cost of their maintenance. The Colony decided to assume their support, and thus laid the foundation for an expenditure which has at last reached the annual amount of some three hundred thousand dollars — the sum now paid to State paupers. It was the necessity of having some general control of this expenditure, more than a clear perception of the importance of regulating all public donations, that led to the suggestion of a State Board of Charities in 1858, and to its establishment in 1863. In this view of the matter, it may be called an accidental growth, rather than a piece of premeditated legislation. It was preceded for more than ten years, by a Board of Alien Commissioners, corresponding in many of their functions to the Commissioners of Emigration in the City of New York, whose work is so vast, so beneficial, and so well known. But besides the duties properly belonging to Emigrant Commissioners, the Massachusetts Alien Board exercised a partial

control over the establishment designed for the State's poor, and were brought frequently in contact with the thousand local officers, called Overseers of the Poor, who managed the charitable funds of the towns and cities. Thus the way was prepared for the new functionaries, whom Governor Andrew appointed in 1863, and one of their number was the former Chairman of the Alien Commission, whose powers were transferred, with additions, to the Board of Charities. To this gentleman, Henry B. Wheelwright, a great part of the success of the Board is justly to be ascribed.

Entering upon their duties in October, 1863, in the very midst of the war, the seven gentlemen who first served on the Board found plenty of work before them. There were three State Lunatic Hospitals, with an average population of one thousand one hundred patients; four Almshouses, (one of them styled a hospital,) containing nearly two thousand paupers of the State; three State reformatories, with more than six hundred pupils; a State Prison with four hundred convicts, and some twenty-five county and city prisons with one thousand four hundred more prisoners, all coming under their inspection and oversight. Besides these there were a Blind Asylum, a Deaf-Mute School, an Idiot School, an Inebriate Asylum, and an Infirmary for diseases of the Eye and Ear, which they were expected to visit and report upon; and they were to receive returns concerning the towns' poor, from each of the three hundred and thirty-four cities and towns of Massachusetts, and gather what information could be had on that subject. They were also to examine all alien passengers landing in Boston, and make all transfers and removals of aliens and paupers that should seem necessary. They had under their supervision an average number of nearly six thousand inmates of public establishments; the number of alien passengers has proved from fourteen thousand to twenty-four thousand yearly; and the removals and transfers have been between two and three thousand yearly.

I have some hesitation, in speaking of what this Board has accomplished in the five years of its existence, lest I may seem to attach too much importance to events coming under my own notice; but there is no better way of illustrating the nature

and advantages of the supervision I am advocating, than by showing what it has actually accomplished in a single instance. If I exaggerate its results, I trust that our President, (Dr. Eliot,) and my esteemed friend, Dr. Wines, who are familiar with its history, will correct me. The first work of the Board was to collect and publish information concerning the establishments under its inspection; for, strange as it may appear to those not acquainted with the general lack of interest in this subject, there was nowhere in existence a concise and comprehensive description of these institutions, whose very objects were unknown to a majority of even the Legislature. Their reports were yearly printed, and some of these were of much value, and became widely known; but the authorities of an institution did not, in all cases, know its history and experiences, and few of them had any but the most general knowledge of the system under which they were acting. I except the medical superintendents of the lunatic hospitals, who, as a rule, are the most active and intelligent of all those connected with charitable institutions. I do not mean to censure any one in stating these facts, for they were the natural result of our want of system. It had been nobody's special business to place this information within reach of the public; each official had been fully occupied with his own work, which was exacting; and few had even felt the necessity of setting that work fairly forth for public inspection. When this had once been done, the natural relation of one establishment to another explained, and their relative value made clear, a great step had been taken towards the improvement of all. In the first two years, this was the most useful service rendered by the Board, apart from its practical labors in disposing of the cases of thousands who came before them for relief or removal. In these two years the forms of statistical returns were so improved that the essential facts of number, age, sex, cost, etc., of the dependent classes in Massachusetts were, for the first time collected and published with some degree of accuracy. Much yet remains to be done in that direction, but I am assured by persons of wide observation, that the Massachusetts statistics of this kind are more to be depended upon than any others in this country.

In the meantime the condition of the establishments had been steadily improved by making a better classification of the inmates, and increasing their facilities for education and employment. In the third year radical changes were introduced and established by legislative action. One of the four Almshouses was closed — the Sansford Hospital — and provision was made for the care of a portion of the sick without sending them away from their friends. Another Almshouse was converted into a workhouse for the dissolute and vagrant poor, and a third was mainly devoted to the education of the poor children, under the name of a State Primary School. By these changes the pauper system of the State became reasonably well adapted to the circumstances under which it exists. At the same time such changes were made in the law, as to provide for a gradual reduction of the number of the State's poor, by giving them a local settlement, or right to relief in some town or city; and so far have these changes gone, that whereas, five years ago the class, from which the State's poor are drawn, — the unsettled population — was fast increasing in number, it is now relatively diminishing. This has a double effect, — it allows the poor to be relieved with less separation and hardship, and it reduces the draw upon the State Treasury for their relief.

Without entering into further details, it may be said that, tried by the three tests of economy, humanity and efficiency, the present state of the public institutions of Massachusetts is good evidence of the excellent results of faithful supervision by a central Board, freed from the jealousies and partialities which are natural to the authorities of the several institutions. These jealousies are weaker than formerly, and while there was at first a marked distrust of the central Board, on the part of the Superintendents and Trustees of some of the establishments, there seems now to be entire confidence in its impartiality and good intention. The expenditures incident to the system have not, on the whole, increased during the five years, while the condition of the beneficiaries is decidedly improved. And so well satisfied are the people of other States with the Massachusetts plan of supervision, that it has already been adopted in New York and Ohio, each of which has a Board of State Charities, and is recommended for adoption by legislative

committees in Pennsylvania, Rhode Island, and, I believe, other States.

In the three States, which have Boards of this character, the members of the Board serve without compensation, but receive their travelling expenses. In Massachusetts, however, a Secretary and a General Agent, both salaried officers, with several clerks, are appointed, and are *ex-officio* members of the Board. In New York there is a Secretary, elected by the Board, and I think the same is true of Ohio. While this plan of membership, without compensation, and without special powers, is well calculated for beginning such a work as these Boards have to do, I am inclined to believe it is not the best for permanent service. In the Massachusetts Boards of this kind — like those of Education and Agriculture — it is found that the salaried officers are apt to be the most active and influential, while those who devote but a small portion of their time to these duties, cannot perform them to their own satisfaction, even though the public may be satisfied. Moreover, special duties best fit men to be members of such a Board, because those duties lead each member to form and maintain an independent opinion, thereby strengthening the Board, and making it more useful; while the responsibility attaching to every salaried officer, who is held to account for his own department, is vastly better than the mixed responsibility of members, who can charge each other with the weight of deciding questions, and make it very difficult to fix blame or praise anywhere. This last-named peculiarity is the great defect of Boards, and has been used as an argument against them from the formation of the Federal Constitution, when we got rid of the Boards of War and Treasury that had made so much trouble under the confederation, down to the revision of the New York Constitution two years ago, when our associate, Mr. Gould, argued so strongly for a single head of the prison system. But, in spite of all arguments, Boards exist, and will exist, for they have advantages of counsel and influence, which may offset their weakness in executive work. A plan has occurred to me, by which, in the management and supervision of Public Charities, we may secure the maximum of individual efficiency, along with the maximum of coöperation and discretion, which a Board is supposed to furnish. It has already

been proposed in Massachusetts, and in due course of time may be acted upon there. With the necessary changes, to adapt it to smaller and larger States, it may be found serviceable elsewhere, and I will venture to state it.

Like most of the larger States, Massachusetts has a Board of Education, of which the working members are the Secretary and his Agent, — the latter not being technically a member of the Board. The Board of Charities has for its working members the Chairman, Secretary and General Agent, the other members of both Boards serving without compensation, and giving but a fraction of their time to this work. The nominal Chairman of the Board of Education is the Governor of the State. Now, as the duties of these two Boards, though wholly distinct at one extreme, blend and become identical at the other, it has been proposed to induce a certain coöperation between them by giving them the same Chairman, who should be salaried, and should give his time to their work. The other members of the Board of Education (all salaried) should be 1. the State Treasurer, who is now one of the Trustees of the School Fund, and who should retain that function under the direction of the Board; 2. the State Librarian, who, in addition to his other duties should be charged with the inspection and recommendation of school-books, and the suggestion of school libraries; 3. the Secretary, as at present; and 4. the General Agent, who should be added to the Board, of which he is now only virtually a member. These changes would be more nominal then real, with the exception of a new Chairman, to replace the Governor; for the Treasurer is already half a member, as Trustee, the State Librarian is Assistant Secretary, and the Agent acts in the same capacity. Our Board of Charities should consist of six members, besides the Chairman, whose services it would divide with the other Board. They should be, 1. an Inspector of Prisons, invested with power to visit and regulate the discipline of all the prisons in the State, from the lock-up to the State Prison, and to make transfers of convicts between prisons of the same grade; 2. an Inspector of Almshouses, Hospitals and Reformatories, who should also act as Commissioner of Lunacy; 3. a Labor Commissioner, who should be charged with the inspection of factories, and the

supervision of the laws for the schooling of children employed in manufactories, and of those relating to hours of labor; 4. a Visiting Agent, who should look after the children placed in families from the public institutions, and find places for others; 5. a Secretary, as now, and 6. a General Agent, as now, to act as Emigrant Commissioner. These appointments also would do little more than make permanent and efficient what exists already in Massachusetts. We have no single Prison Inspector, but we have some four-score local inspectors, whose united expenses amount to nearly twice as much as it would cost to maintain one competent officer. We have no single Lunacy Commissioner, or Almshouse Inspector, but we have about fifty local Trustees and Inspectors, who cost the State more than three thousand dollars a year for their salary and expenses. We have no Labor Commissioner, but we have had two Labor Commissions since 1865, and for the past two years, a special State Constable detailed to look after the factory children. We have now a Visiting Agent, appointed by the Board of Charities and responsible to them. So that, in fact, the creation of these offices would involve scarcely any additional cost to the State, while it would secure a thorough administration of our system, which is not possible under the present arrangement. The plan also allows the continuance of the local Inspectors, but without compensation, and some revision of the duties of the two Secretaries. If it were desired to equalize the number of members in the two Boards, the Labor Commissioner might be made also a member of the Board of Education; and we should then have two Boards, of six members each, having two members in common.

I am not sure that this plan would not work well in New York, Pennsylvania and Ohio; at any rate, it could be extended to meet their exigencies. For States like Illinois, Indiana, Iowa and Missouri, it would require no change; for Maine, Connecticut, New Jersey and the smaller States, a smaller number of members would be required. The Board of Education might there be reduced to three, — a Chairman, Secretary and State Librarian; and the Board of Charities to three, — a Chairman, Secretary and Agent; giving five members only for both Boards. In Vermont, New Hampshire,

Rhode Island, and the newly admitted States, four members would be enough for both Boards — a common Chairman and Agent — and a special Secretary for each. This Chairman might be the Governor, and one of the Secretaries, the Secretary of State, as now is the case, I believe, in Rhode Island. Indeed, the details of the plan can easily be adapted to each State, if its general principles are once admitted.

These principles have been already stated or implied in this paper, but let me recapitulate and state them more directly.

1. Our large expenditure for charities, increasing with our population, and in large cities, far beyond that ratio, demands a systematic supervision, such as we give to our other great items of expenditure. The annual cost of Public Charities in Massachusetts is a seventh part of the whole cost of our State and municipal governments, and excluding the interest on our public debts, it is almost a fifth part. Of the ordinary expenses of the State government, exclusive of interest on the debt, and special provisions for its payment, nearly half — say one million four hundred thousand dollars — was last year paid for charities. This includes the mixture of pension and relief known as "State Aid" to soldiers and their families; but the charities, strictly speaking, amounted to more than half a million of dollars; while the other expenses, setting aside those coming from the debt and the war, were scarcely thrice as much. In ordinary times our State charities will demand a quarter part of the ordinary revenue.

2. This supervision will introduce order and economy, will promote humanity, will relieve the community of much imposture and outrage, and will also relieve public charity of much of the odium now attached to it. It is the abuse, not the execution of the theory of Public Charity, that has drawn down upon it the reproaches of fiction and of political economy. The abuses of private charity are quite as flagrant, only they are not brought to notice so constantly.

3. To secure a thorough supervision, it is necessary to have a few persons specially devoted to it, with adequate compensation, and the respect and encouragement of their fellow citizens to aid their efforts. Unpaid labor in this department is very useful, and gives a noble employment to persons of fortune or

independence, who have a talent for it. But it can never work to the best advantage in positions of permanence and control, because the strictest degree of responsibility does not attach to it.

4. These special Supervisors should have each his own work, and should also form a council for mutual aid and criticism. None would be so competent as they to criticise and hold each other up to the task imposed, for none would know so well what ought to be and what could be done. For this reason they should be combined into a Board.

5. The interests of charity and education are so closely identified — in this country at least — that there should be an actual coöperation between the public Supervisors of both.

6. To effect this, there should be Boards of Education and of Charity in every State, and these should be under the presidency of the same chairman, and, when feasible, should employ the same agencies.

I could wish, if there were time, to dwell on the advantages of harmony and coöperation between the several States, which would be greatly promoted by the establishment of such Boards as I have recommended. There is no real reason why, in these respects, all the States should not stand in the same relation to each other, that the counties and municipalities in each State now do. There need be no conflict, no over-reaching between State and State, as there is, too often, at present. The poor need not be pushed along from one State to another, unless, by so doing, they can be placed where the duty of relieving them properly belongs; nor need the mighty army of vagrants now moving over the face of the country, be entirely uninterrupted in their march. It ought not to be so difficult as it is now, to trace the perpetrators of crime from one jurisdiction to another, nor would it be, if in each State a central Board had the means of identifying old offenders and convicts discharged without reformation. In all these respects, the good of the whole country would be promoted by the formation and coöperation of such State Boards as I have proposed.

Of course, I need not say that there is no such necessary connection between the public supervision of education and the public supervision of charity and correction, as to require

the coöperation of the two Boards which have been suggested. Public Charities, of which I am speaking, do require, in my opinion, the sort of supervision proposed, and they will continue to demand it more and more, as they develop and extend their operations. But then, best administration also demands a supervision in detail, to which I can only briefly allude. It is common to compare the utility and efficiency of public with private charity, to the great disparagement of the former. But let us not be deceived by words and phrases. The money raised for charitable uses by taxation, may be as judiciously and humanely expended as that which is voluntarily given; and, on the other hand, the resources of private charity may be, and often are, as recklessly squandered, as foolishly misapplied, or as wickedly perverted as public funds can be. With both, what is needed is a minute, personal and conscientious devotion of individuals to their charitable work, whether as benefactors, as almoners for others, or as servants of the public. Every overseer of the poor, every visitor for a benevolent society, ought to feel that without a personal and scrupulous performance of their humane office, they become perverters of a most sacred trust. There is too much of this doing good by proxy, which is quite as often doing harm as good. True charity is twice blessed; that which is carelessly and perfunctorily administered has not the grace of a single blessing; it is given with a grudge and snatched with a curse.

A single word on the increase of pauperism. It is popularly believed, and often officially proclaimed, that in the United States this tremendous evil of pauperism, of which England furnishes us the saddest example, is rapidly increasing. In some localities, and under some circumstances, I doubt not this is true. But, where measures of prevention and relief are wisely taken, and a system of public or private charity is thoroughly and well administered, pauperism decreases in our country. In Massachusetts, for example, I am well satisfied, from the investigations of five years, that we have less pauperism in proportion to our numbers and our wealth than we had ten, twenty, or fifty years ago. It ought to be so everywhere in this noble country of ours; and to secure this result it only needs that we should apply to the treatment of pauperism the

same energy, good sense and good will, that every thorough American brings to the management of his daily affairs. This is what the Jews of London have done in their remarkable treatment of poverty among their own people; this is what distinguishes the administration of Public Charity where it is best understood; and this, with the blessing of Heaven, will free us from the Old World's legacy of pauperism, as completely as it has already freed us from the worse legacy of caste and slavery.

F. B. SANBORN.

A METHOD OF DIFFUSING USEFUL KNOWLEDGE.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION AT ALBANY, NEW YORK, FEBRUARY 19th, 1869.

I respectfully suggest a method of diffusing and popularizing important truth, whether moral or physical.

The most urgent public need of to-day is the careful preparation and cheap publication of a series of larger tracts, embodying all that is known beyond dispute in the domain of Natural, Intellectual and Moral Science.

These tracts should be concise, but comprehensive treatises on distinct topics of practical consequence, each covering from thirty-two to sixty-four pages, printed in large, fair type, on good, white paper, and sold at five to ten cents each.

Among the topics most urgently demanding treatment, I would suggest the following:

1. VENTILATION. — The tract on this subject should explain the nature of respiration, its organs, their uses and their perils; and should show how and why pure air, when inhaled, conduces to health, vigor, strength, activity, longevity; while impure air (duly defined) is necessarily injurious, usually perilous, and often fatal. Practical recommendations for improving the ventilation of all premises fit to be inhabited, and warnings against malarious regions, pestilent exhalations, noxious vapors, stifling bedrooms and poisonous holds, cabins, forecastles, cars, and other nurseries of fever and contagion, should conclude the tract.

2. SEXUAL MORALITY: what are its requirements and their sanctions, what its violations and their fearful penalties. This should be especially addressed to children and youth, and in time superseded by two or more addresses respectively to persons of different ages and sexes.

3. HABITATIONS: How to choose a fit location, and how to overcome or greatly modify the injurious effects of a bad one. The best plans for dwellings of the simplest and cheapest construction, should be given, with estimates of cost and suggestions

for drainage, light, air, prospect, etc., etc. The baneful effects of dampness, shade, sunken location, etc., should be carefully indicated.

I estimate that our people are building more than one hundred thousand dwellings per annum, at an annual cost of over one hundred millions of dollars; and that our deaths are at least one hundred thousand more per annum than they would be, if our habitations had been properly placed, constructed, ventilated, at no greater than their actual cost. A dime tract embodying the most that could be fitly suggested on this theme, would be generally bought by those about to build or rent habitations, and would save millions of dollars and thousands of lives per annum.

4. HEALTH: What it is, and what are its most formidable enemies; how it is to be preserved, and how (apart from medication) inherited, or contracted evils may be resisted and overcome or modified by cleanliness, temperance, exercise and fit surroundings.

5. FOOD: What is and what is not properly edible, and how the the two classes are distinguished; the function of food; the laws governing its reception and use; the purposes of cooking, and the modes in which bad food and bad cookery impair the health and strength, damage the tempers and destroy the lives of our people.

But I need not pursue these illustrations, since five will serve as well as fifty. I do not suppose the range of topics demanding popular exposition and elucidation would ever be exhausted; but I would be in no hurry to diversify the themes discussed. If four new tracts were issued each year, it is quite likely that their aggregate value would exceed that of twenty issued in a like period.

Each tract should be prepared by the most competent and best qualified person who could be induced to undertake it — should make no pretensions to originality or novelty, but should be simply a condensed, methodized summary of all that is known and established on the subject beyond reasonable question. Brilliancy of style should not be regarded, though attractiveness to sober minds would add to the practical value of any treatise. When completed by the author, it should be

referred to a competent Committee for criticism and revision, but no change should be made but with the author's full assent. If he and the Committee cannot fully agree, let the publication be deferred till the truth shall be made manifest.

The ordinary machinery of Advertising Agents, Expresses, and Mails, would largely facilitate the distribution of these tracts, but the issuing society should have branches wherever they can be formed, each supplied with the tracts at cost, and intent on giving them the widest and most general circulation. Sets could and would ultimately be bound in a volume or volumes for preservation and future use.

I estimate that tracts of thirty-two large pages might be sold in large quantities at four cents and retailed at five cents each; those at sixty-four pages at double these rates; and that the number of copies bought and read would be counted by hundreds of thousands, provided the treatises were, as they should be, of the very highest merit.

I do not think any individual publisher, however spirited, could realize this idea. He would at once be exposed to competition and detraction, and would be tempted to issue too hastily and without thorough scrutiny by a competent Board. Besides, these tracts should be so issued as to preclude the idea of pecuniary advantage to the issuers. The Society should constantly correct any errors in one of its published tracts, which the progress of scientific research and discovery would suggest, and should be prepared to embody in future issues of its tracts already published, any new truth that may from time to time be discovered.

I do not suggest the publication of such a series to be within the proper scope of this Association. I do not ask the Association even to consider whether it may not be. I only improve this opportunity to urge that there ought to be a Society, even though one should have to be organized on purpose, to provide and diffuse such summaries for popular use of elementary Physical and Moral Truth, and that its existence and operations would surely and signally conduce to the diffusion of Knowledge, Virtue and Happiness — in other words, to the advancement of Social Science.

HORACE GREELEY.

THE PROTECTION OF THE BALLOT IN NATIONAL ELECTIONS.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT ALBANY, NEW YORK, FEBRUARY 19th, 1869.

If the study of social problems teaches any one lesson more distinctly than another, it is that political virtue and political corruption are never the peculiar property of any particular party in the State. Only the partisan believes that all virtue is to be found in one organization, and all vice in another. The observer soon discovers that an almost imperceptible line separates, in these respects, contemporary political organizations, and that the charges made against one faction existing in the State, with slight changes of form and detail, may, with equal justice, be made against every other. Fraud in one party begets fraud in another, and corruption begets corruption, if only under the plausible argument that the devil must be fought with the weapons of darkness.

In dealing with a question which lies at the very basis of political life in America, this paper will make no pretence to profundity — no attempt will be made to lay down any elaborate system to secure purity to the ballot, — no partisan arguments will be advanced. Government, through representation and suffrage, as at present developed into a system, is but one way, and a very imperfect and unsatisfactory one, of arriving at a given result. The object of every political system is to bring the loftiest development of moral and intellectual education which any given community affords to the direction of its affairs. Just at present it is the fashion to consider an extension of the suffrage, — a more elaborate and careful enumeration of noses as it were, — as the grand and effectual panacea for all political evils. This idea will certainly last out the present, and probably several succeeding generations. Without at all conceding that this system is the best that can,

or, in process of time, will be devised, it is yet the system under which we and our children have perforce got to live, and the student of Social Science can devote himself to no better task than to the purifying and protecting of the system, however crude and unsatisfactory it at best may appear to him.

To us in America, it is not only the system under which we are to live, but we also must study it in its peculiar manifestations as working out its results through the machinery of certain systems of written constitutions, now long established. Certain practical difficulties and manifest evils are now making themselves felt in the operation of the suffrage through our machinery of Government, and with these the present paper proposes to deal. The question is a large and difficult one, and stands rather in need of suggestion and discussion, than of patent legislative panaceas or individual dogmatism.

An exciting and important national election has just been passed through, and the usual good fortune of the American people has presided over the result, in that it has not proved to be in result a disputed election. The popular verdict has been sufficiently decisive to cover any margin of fraud, on the one side or the other, and all parties concede that the new occupant will not be cheated into the Presidential Chair. This may not always be the case. The election was preceded by loud charges of wholesale fraud, made indiscriminately by each of the parties which divided the country, against the other, — the election day was marked by many scandalous incidents which well might have vitiated the results in important localities, and, finally, it has been succeeded by a general desire that something should be done, resulting in the usual unlimited suggestions of crude legislation. Two things seem likely to result from the agitation now dying away, — first, an extension of the suffrage, and, secondly, a renewed discussion of the long vexed question of the naturalization laws.

Both are important questions ; in fact, without exaggeration, they might be spoken of as vital questions ; and both are deserving of a calmer and more philosophical discussion, and of a decision more exempt from party exigencies, than they seem likely to receive. Yet it may possibly be that the immediate evil which presses upon the country does not lie in either of

these directions; it may well be found more on the surface, a mere matter of detail or of defective organic law. The first question necessarily is, — what is the difficulty? That found, the remedy may not be far to seek. What is it that the popular instinct has been apprehensive of? What dangerous elements have developed themselves, — what weak points in our system, which create this manifest uneasiness for the future, and the desire for change? It probably would be generally conceded that the real trouble has been that the mass of the people of all parties has been apprehensive that the purity of the ballot was not sufficiently protected; that somehow the election both could and would be carried by fraud; that the will of the people was to be corruptly set aside through some perversion of the forms of law. If this brief statement of the case is accepted as correct, it only remains to consider the manner in which, and the machinery through which the election was held, and the result arrived at, and then to suggest, if possible, some remedy for the evil experienced.

One leading feature of the skilfully constructed Constitution of the United States, is a confessed and universally conceded failure. The machinery for the election of the President, through a system of Electoral Colleges, has never operated as the framers of the instrument supposed it would operate. From the outset it has proved a cumbersome and useless arrangement, practically set aside at the first election of the first President, the Colleges from that day to this have never done more than register the decision previously arrived at by direct popular action. This duty, and this only, do they perform. The most ardent admirer of our Constitution, the most bigoted opponent of innovation, can claim for them no other function. The simple question then is, how well do they perform this duty? How accurately do they register the popular verdict? A few figures, fresh in the memory of every one, will answer this question, and prove beyond a doubt, that the system has not only failed in its object, as contemplated by those who inserted it in our organic law, that it is not only cumbersome, clumsy and thoroughly useless, — that it not only does not correctly register the popular verdict, but that it does hold out more inducement to corruption, more opportunity for

fraud,— that it now creates more inequalities of influence, and threatens greater dangers to our system, than almost any other system which human ingenuity could have devised. This language is strong, but the figures must bear it out.

The successful candidate in the recent election received a majority of five per cent. in the popular vote. In the Colleges he received a majority of forty-four per cent. Such is the accuracy with which the result was registered. This is one side of the question; now turn to the other. Every one remembers the loud cry of fraud which preceded, accompanied and followed the election, — a cry raised and reiterated by both parties. Some of the vague charges advanced in those days of excitement, have been to a degree authenticated by subsequent legal and legislative investigations. In one locality the favorite method of violating the ballot seems to have been through a system of naturalization papers, founded upon perjury; in another, a simple process of walking from ballot-box to ballot-box and depositing multifarious votes, was resorted to; in a third, a wholesale system of emigration was organized. In New York City several scores of naturalized citizens were subsequently discovered to have been registered as residing at, and to have voted from single houses, which did not at the time contain a dozen occupants of both sexes and of all ages. In Indiana it was vehemently alleged that the voters of the adjoining counties of Kentucky, Illinois and Michigan emigrated *en masse* upon the election day to the polls of the sister State; those of Ohio were busy at home. In Philadelphia four individuals, imported for the occasion from New York, confessed in the subsequent investigations to having voted sixty times in a single day. In none of these localities do the registry laws seem to have afforded any protection to the ballot. In Indiana, indeed, none exist; but in Philadelphia and in New York, the registries were hardly less of a farce than that famous Border Ruffian registry in Kansas, before the war, which investigation discovered to be a verbatim copy of an old Cincinnati Directory. The immediate result of the outcry raised in consequence of these revelations was the introduction into Congress on the first day of the session of a number of bills, all looking to one end, — the amendment of the naturalization laws. The remedy

proposed was significant of present ideas on the subject of legislation. It is difficult to see how any amendment of the naturalization laws, however desirable in itself, could prevent the native born citizens of one State from flocking into another, or the citizens of New York from voting twenty times apiece in Pennsylvania, or certain polling districts in New York from casting more votes than they contained inhabitants.

Now, under our existing system of Presidential election, what is the significance of the votes cast in these localities? What weight do they carry with them? Are they simply single fraudulent votes? Or do they not rather, through the unnecessarily complex nature of our system, receive a mysterious and artificial importance? Throughout the recent canvas, the result of the election was felt to depend on the result in three States, and those States were New York, Pennsylvania and Indiana. There was the battle ground. Those States threw seventy-two electoral votes. Overwhelming popular majorities elsewhere might be conceded without affecting the result. While the three States mentioned were in doubt, the election was in doubt, and a majority of a single vote in each of those States might well make or unmake a President, regardless of the size of majorities elsewhere. Here indeed were both the inducement and the opportunity for fraud. Here indeed did the ballot-box stand in need of protection! To show how close the result in those States was, what a temptation to fraud existed, it is only necessary to say that there, where the battle was fought and the President was elected, while the majority for General Grant was but a little over one and one-half per cent. of the popular vote cast, the defeated party actually had, in the aggregate vote upon the State issues, a nearly equal majority the other way. In an aggregate vote of over one million eight hundred thousand, one party had a majority on the National issues of twenty-eight thousand four hundred and sixty, and the other party a majority on the State issues of seventeen thousand three hundred and eight. Such was the condition of affairs where the issue was decided. How was it elsewhere? New York casts thirty-three Electoral votes, exactly the same number as are cast, in the aggregate, by the three States of Illinois, Massachusetts and Vermont. The ten

thousand majority in New York exercised precisely the same degree of legal influence on the result in the Electoral Colleges as did the one hundred and sixty thousand majority cast in the other scale by the three States mentioned. The result showed that one vote in New York outweighed sixteen votes elsewhere, and, if the purity of the ballot-box was to be violated, New York presented the best field for operations. Again, New York and Pennsylvania together threw fifty-nine Electoral votes, just the number thrown by Illinois, Massachusetts, Michigan, Maine, Wisconsin and Iowa combined; the six States last named, gave General Grant two hundred and fifty thousand popular majority. Yet a change of ten thousand votes by accident or design in New York and Pennsylvania, would have negatived the two hundred and fifty thousand, and made them, so far as the Presidential election was concerned, of no more value than six votes.

Again, California now has five voices in the Electoral vote, so also has Vermont. These two States gave General Grant thirty-two thousand six hundred and thirty-six popular majority and their ten Electoral votes. A change of two hundred and sixty votes in one of those States would have divided their Electoral votes between the two candidates. The vast popular majority would have gone for nothing. Six hundred manufactured votes in California, a single fight at the polls and one energetic effort by some daring ballot stuffer, would have had the same influence on the great result as the thirty thousand votes cast in Vermont.

Take another instance, not of what might have been, but of what *did* occur. Oregon and Kansas both throw three Electoral votes. A majority of just one hundred and sixty-four votes in Oregon exactly offset in the Electoral College a majority of seventeen thousand and thirty votes in Kansas. Knowing voters to be corruptible, politicians, no less astute than unscrupulous, might doubtless have manufactured, imported or bought a few hundred votes in Oregon. One fraudulent vote there, as affecting the result under the present system, outweighed one hundred honest votes in Kansas, where it was not worth while to cheat.

A single instance more. Oregon and California together have eight electoral votes, the same number as Iowa. Iowa gave General Grant forty-six thousand popular majority. A change by accident or design in one place of two hundred and eight votes, — an informality in a return, — an error in arithmetic — the mistake of a country printer — anything from the chapter of accidents or from the devices of cheatery, would practically have negatived forty-six thousand votes in another place. A single ballot manufactured by one party on the coast of the Pacific, could be made to counterbalance one hundred and eighty votes belonging to the other party on the banks of the Mississippi.

It is useless to further enumerate particular instances. If those already given do not convince, none will. It may, however, be added that a change of less than thirty thousand votes in seven States in the recent election would have made Governor Seymour the legally elected occupant of the Presidential Chair, while his opponent would still have received a popular majority of two hundred and eighty thousand votes in the whole country. Neither has this election been peculiar in these respects. In 1864, the majority of the dominant party in New York was less than one per cent. of the popular vote. A change of three thousand four hundred votes, through any of those means so well understood by politicians, — means better understood now than they were then, — such a change would exactly have negatived in the electoral vote one hundred and forty thousand majority in three other States. Again, — in 1844, the election was actually decided by the vote of New York. That vote elected Mr. Polk, as it well might have elected Mr. Clay. Had Mr. Clay not indulged in letter-writing, — had he not alarmed a few hundred Liberty-party men in Western New York into voting for Mr. Birney, he would have been elected President by a majority of the electoral votes, with a popular majority of over thirty thousand in favor of Mr. Polk.

Under the existing system, therefore, a premium is placed upon fraud. The violation of the ballot-box by one party, makes its violation by the other what is called, in the parlance of the day, a political necessity. This, indeed, is the saddest and most alarming feature of the whole system. The com-

munity not only becomes accustomed to political fraud, but it learns to excuse it as in some way a necessity. We are losing the moral sense, and censure failure alone. While the moral perceptions thus become blunted, the opportunity for fraud is more and more, in each successive election, localized and designated. The least astute politician knows just where votes are necessary and just where they are useless. The more astute know also just *how many* are wanted and how they are to be had, as well as *where* they are wanted. Fraud, — energetic, well-directed fraud, will probably soon decide every closely contested Presidential election, unless the system of Electoral Colleges is reformed out of existence.

The surest way of preventing crime is to remove the inducement to it. The most effective protection to the ballot will be found to lie in making frauds upon it, as far as may be, unavailing. As has been pointed out, the present system both provides the machinery through which the frauds may be made peculiarly effective, and, at the same time, designates the localities where they can best be attempted. The removal of the system of Electoral Colleges would not indeed go to the root of the evil, but it would at once deprive it of its greatest inducement and best opportunity. The fraudulent vote now has a vast fictitious value. It will continue to have it until a fraudulent vote can in no case have a greater weight than an honest one. It is claimed that in New York City twenty-five thousand illegal votes were cast in the recent election. The Report of the Investigating Committee has not yet been published, and the statement is now merely advanced for what it may be worth. If such was the case, however, those who manipulated that vote simply made assurance doubly sure, — fifteen thousand and one would have done just as well. It now remains to be seen how long the voters of Illinois, Ohio, and Massachusetts, — rolling up useless majorities by scores of thousands, — will stand with folded arms and calmly watch the workings of a system under which one vote in the sixth ward of New York may well outweigh fifty votes within their own borders. It may be impossible, as it certainly is very difficult, to prevent all fraud at the polls, or fully to protect the purity of the ballot, — it is not necessary,

however, to perpetuate a system which cannot but ultimately reduce fraud to a science. A vote, be it fraudulent or be it honest, need still be but one vote. Ten illegal votes in one precinct need not of necessity outweigh more than ten legal votes in another, and not, perhaps, eighteen hundred as at present. This holding out temptation to fraud is surely superfluous. If the system of Electoral Colleges possessed any secondary or incidental advantages, it might yet find intelligent supporters. It can claim none. It affords only alarming occasion for trouble, for it seems invented to encourage the formation of third parties and the defeat of elections. What greater imaginable strain could be imposed upon our system of government than an election of the Chief Magistrate by a body which now cannot even count an undisputed electoral vote without disgracing itself and the country by unseemly broils. Twice in our history have elections gone into the House of Representatives. One almost resulted in placing Aaron Burr in the Presidential Chair; the other did result in the election of the candidate of a distinct minority.

To remedy the manifest dangers of the system, a Senator has recently proposed that the electors should be chosen like members of Congress, by districts, instead of on a general ticket as at present. This would partially reform that which rather calls for reformation altogether. Small majorities in some districts would still counterbalance large ones in others. The evil would be mitigated, not removed. Practically, the people of this country certainly will vote directly for their candidates for the Presidency. Why should they ever compel themselves by indirections to make directions out? In this case there is no check to be preserved, no balance of power to be guarded. What good reason can be given why we should vote for one man, or thirty men, who in turn are to be pledged to vote for another man, designated to them beforehand, instead of voting directly for the object of our choice? Why must that needs be made complicated which can better be kept simple? Can any good reason be suggested why the people of this country should not directly vote for their Presidents, as they ever have for their Governors? By so doing they would avoid the whole danger of Congressional Elections. The popular

votes of each State could be returned to the President for the time being, or to the Chief Justice, from the State Magistrates, or from the United States Courts; and the officer to whom they were returned would have nothing to do but to go through a simple sum in addition and subtraction,— a sum which every newspaper in the land would already have done for him, and then, in the form prescribed by law, issue his proclamation announcing the result. The Legislative need then have no voice in the election of the Executive any more than it now has in the election of Governors of the States, — it could not. even wrangle over the counting of the votes.

It may, however, be objected that such a system would tend to silence the voice of minorities in Presidential elections. This objection, if made, admits of a conclusive answer. Minorities can have, and should have, no voice in the organization of the Executive. This sound principle of political science the framers of the Constitution seem to have lost sight of when they incorporated into it the system of Electoral Colleges. They then devised a machinery which has ever stimulated the formation of factions in the choice of Electors, — which has ever tended to give an undue prominence to minorities in years of Presidential election. The Executive must be responsible, and responsibility ceases when it is divided. The principle of representation of minorities is as dangerous and out of place in the organization of an Executive, as it is useful and essential to the Legislative. In both respects our system is crude in the extreme. A local faction, which can control the electoral vote of a single State, may at any time, perhaps, defeat the popular choice in a Presidential election, and carry the country far towards anarchy; while, on the other hand, we have now for years seen a party, controlling a majority never exceeding ten per cent. of the popular vote, metamorphosed into a Legislative majority of fifty per cent. and completely overriding the minority in the halls of Legislature. If the minority is admitted to a share of the Executive power, the Government will fall into an anarchy; if, on the other hand, the minority be excluded from the Legislature, then the Government will fall into that worst of all tyrannies, the unbridled tyranny of a popular majority. Our present system tends in its operation, though

not decisively, to both the one and the other of these evils. This subject, however, while the works of Hare and Mill have left nothing that is new to be said in regard to it, is not germane to the present discussion, and is very comprehensive. It is referred to here simply as an objection which might be advanced, but which is founded on a fallacy. The laws of political science which apply to the organization of a good Legislative, in no way apply to the organization of an effective Executive. Experience has everywhere shown that the election of an Executive by a direct, popular, plurality vote has tended, as indeed in the nature of things it must tend, to that healthy concentration of popular action, which, by making minorities useless prevents their formation, and removes in this way the greatest danger of popular institutions, which always must be found in indecisive elections. Any decision is better than no decision, where an undivided decision must be had, — just as any government, even the worst, is better than anarchy.

Hitherto the discussion has looked solely to the removal from our system of the great fictitious incentive to fraud at the polls, — that which unconsciously makes the whole community approach this question with an instinctive sense of its importance. It now remains to say a few words of the fraud itself, as we see and feel it, and to consider if anything can be done to insure to the ballot exemption from it.

As population increases, — both as voters are spread over a greater territorial area, and are more crowded within certain centres of population — as the community in fact developes itself into the higher phases of civilization, — in the same degree does the tendency to corruption of the ballot increase. The average wealth of the community increases very slowly, but property always tends to accumulate in few hands, and population at great centres. As a result, both wealth and poverty, as well as education and ignorance are found in their most marked degrees at the centres of highest civilization. In an early and relatively undeveloped condition of society, such as we even yet retain in this country as compared with the inevitable future, the protection of the ballot is comparatively a simple and easy matter. We have no proletariat yet, outside of the City of New York, and fraud

has only begun to be reduced to a system, and has in no degree been elevated into a science. As society developes itself, and wealth, population and ignorance increase,— as the struggle for existence becomes more and more severe, the inherent difficulties of a broadly extended suffrage will make themselves felt. Starving men and women care very little for abstract questions of the general good. Political power becomes one means simply of private subsistence. In any case there are, however, but two ways of perverting the expression of the popular will, — one by the corruption of the individual voter, the other by the falsification of votes. The first of these methods is easily disposed of. It is useless and almost silly to try to prevent bribery and corruption by law. There is, in fact, no sound distinction between the citizen who sells his vote for cash, and the citizen who makes his political course subserve his personal ambition, or lends himself to some demagogue who bribes by an agrarian law. Each subordinates public good to private interest. Every phase of this evil lies beyond the reach of penal law, in the large field of moral education; for, when the citizen is corrupt enough to sell his vote, you cannot effectively prescribe by law that he may sell it for office, but may not for money. No real protection to the ballot lies in that direction.

Though the law, however, cannot well prevent a man from selling his own single vote, and no penalty can reach him who does, the law can prevent a man from multiplying ballots at his own will, and selling himself for a day's steady voting, from early dawn to dewy eve, unlimited by any eight-hour law, and for every recurring election. Men cannot by law be made to respect their own rights, but they can be made not to violate those of other people. In this point of view again, the suffrage question is a national one. Under the present system, a single fraudulent vote in New York or Philadelphia is of infinitely greater public interest than a score of such votes in Boston or Chicago. Yet the control of the citizen over this question, upon which more than upon any other, his rights as a citizen depend, is limited to his own immediate neighborhood, and just beyond that neighborhood, within his sight almost, he is conscious that he is defrauded to an unlimited extent, and yet

has no power for reform. Such a condition of affairs is not a healthy one. It is one thing as regards local and State, and another as regards National elections. If certain local communities are willing to live under a lax and unregulated system of suffrage, if they do not object to seeing the franchise rendered valueless by fraud within their own limits, of course they have a right to gratify their inclinations; but they have not a right to extend that system beyond their own limits to the grave prejudice of their neighbors.

The only real protection of the purity of the ballot, under an extended system of suffrage, must, of necessity, be found in some arrangement for the careful registration of voters. All other systems of protection, such as the challenge based upon personal knowledge, and the like, are adapted only for rude and primitive communities. It is useless to object to the trouble and annoyance which a strict system of registration imposes upon the busy citizen; without that trouble and annoyance, the election day becomes a fraud and a farce, and it is that trouble and annoyance, and that only, which confers its whole value on the individual vote. Where then the whole National significance of a vote in Portland may well depend upon the degree of protection thrown over the ballot in San Francisco,— while a single lawless ruffian in the latter place can by a system of repeating, negative the votes of forty law-abiding citizens in the former, or, by a system of ballot stuffing, negative a thousand — it becomes a question of ever growing importance, how far the regulation of the ballot in National elections should be made a subject of National legislation. In this matter, one law should not obtain at Athens and another at Corinth. Local and State elections, recurring frequently and affecting only local rights and questions, may safely be left to local laws. National elections, recurring at most but once in two years, and more especially enlisting popular and sectional passions, stand in need of uniform regulation. In view of our vastly increasing emigration, and of the direct bearing of the naturalization laws upon every National election, it may become a serious question whether the United States will not ultimately be obliged to take the whole management of National elections into the

hands of National officers. One uniform law and day for such elections, once in two years, conducted by officers of the United States for the time being, under a well digested system of registration, and with an effective law for the detection and punishment of fraud, would, while in itself open to grave objections, yet strike at the root of many of the most crying evils of the present system.

The usual limitations sought to be imposed upon the right of suffrage, — such as qualifications from property, education, sex, race, creed or age — have not yet been referred to. They belong, in fact, to another branch of the discussion. Corruption and ignorance are the two ever present evils which threaten and destroy free institutions. The two, however, are not to be confounded, for the precautions and remedies their existence calls for, are as distinct as are the characteristics of fraud and stupidity. While corruption destroys the purity of the ballot, ignorance affects only its significance. Just at present the question of significance is to us of secondary importance. The great need of the present is purity. It is useless to discuss measures by which a higher intelligence, loftier motives and a calmer reason may be secured to such as hold the ballot, unless its due weight and influence is given to the ballot. When every election may be turned into a farce, those who could infuse intelligence into that election will not probably care to number themselves among the performers.

Purity once secured, however, significance becomes the next requisite. In discussing systems of government founded on popular consent, two principles may so invariably be deduced from experience, and are in such complete accordance with the dictates of reason, that they may be stated as axioms. The first is, that the existence of the principle of caste; the second, that the control of a political proletariat, are each absolutely inconsistent with the spirit and permanence of free institutions. While the existence of caste is manifestly inconsistent with any theory of human equality, the essence of a proletariat is to seek the political control of a community through a close combination of vice, ignorance and brute force, wholly inaccessible to reason or to the dictates of public virtue. A

Government, therefore, which pretends to rest on the consent of the governed, should recognize no principle which opposes to any human being an insuperable barrier to the possession of the suffrage; neither should it admit to the suffrage those elements of ignorance and fraud, which, as civilization advances, always tend to consolidate into a political proletariat. If these principles are correct, and kept steadily in view, they can hardly fail greatly to simplify the consideration of those usual limitations of the suffrage just referred to.

For the first time in the history of mankind, America seems now approaching a practical trial of universal suffrage. It is not manhood suffrage, as at present; nor white suffrage, as formerly; nor impartial suffrage, as sometimes proposed; nor educational suffrage;—but universal suffrage in the largest sense of the term. All signs point that way. One day we hear of a Womans Rights Convention, and some Legislature barely fails to concede the principle of female suffrage; the next day some Senator proposes the total repeal of the naturalization laws, while the adopted citizen demands that he shall no longer be legally excluded from the chair of Washington. It is then proposed to extend the ballot to children, as it has already been given to freedmen. Presently impartial suffrage is suggested, and party organs at once declare it to be a dogma of American faith, that the ballot is the *inherent* right of all *white* men, "be they rich or poor, learned or unlearned." Finally the Senate of the United States, that body to which all the political wisdom of the country is supposed to gravitate, has recently, after long discussion, proposed to submit to the Legislatures an amendment to the Constitution, prohibiting all discrimination for the future among the citizens of the United States, in the right to hold office or in the exercise of the elective franchise, because "of race, color, nativity, property, education or creed." Had the single word "sex" but been included in this amendment, the bars would have been wholly thrown down, and the experiment of universal suffrage, incorporated into the organic law, would have been tried in its full simplicity.

It may well be questioned whether the American people fully appreciate the logical conclusions of the present tendency to make the suffrage a free gift to all comers. The new

experiment will indeed eradicate the last vestige of caste from our institutions, and in so far is consistent with reason and experience. The future has nothing to fear from that quarter. In avoiding one danger, however, there is no absolute necessity of running into another. Caste will have been eradicated at a fearful price, if the elements leading directly to a proletariat are introduced in its place. Now universal suffrage necessarily introduces three new and untried influences into the action of the body politic. Of these the female is the first; for, though in order of time she must be enfranchised after the African and the alien, yet only those who believe in that strange political science which is evolved from party exigencies, can bow to a logic, which, while pretending to eradicate caste, refuses to grant to the Anglo-Saxon female what has been thrust on the African male. Opinions differ more as to the expediency of female suffrage than as to its logic. Experience has seemed to indicate that a certain vigorous, masculine, common-sense and self-control, — a faculty of restraint under excitement — a certain persistence and belief in the wisdom of biding his time, which characteristics have hitherto more especially developed themselves in the Anglo-Saxon race, have everywhere proved the only real safe-guards of popular liberty. Excitable natures rarely strengthen free institutions. How far a large infusion of the more voluble, demonstrative and impulsive female element into the arena of politics will tend to affect what little of calmness and reason is still found therein, remains to be seen. The white female, however, is at least of the same blood and education as the white male. This cannot be said of the African, the second of the untried influences now to be introduced. Whatever may be his latent faculty of development, however high he now should or ultimately may stand in the scale of created beings, it is safe to say that the sudden and indiscriminate elevation of his whole race to the ballot is a portentous experiment. The Anglo-Saxon was not educated to his efforts at self-government, at best but partially successful, by two centuries of Slavery superimposed on unnumbered centuries of barbarism.

The third influence about to be infused by wholesale into our system, is that of the aliens. Of the workings and tendency of

this influence we have already enjoyed some experience. We now appreciate to a degree how much the purity and the significance of the suffrage have deteriorated with us through the irruption of those swarms of foreigners, who have within forty years landed on our shores. While the experience of the past throws some light on the future in this respect, it, in all probability, very inadequately foreshadows it. We have as yet witnessed only the day of small things in the way of emigration. Take the Irish exodus as an example. It has been no easy thing for us to deplete the Celtic race from one small island, and to absorb it into our body politic; still it has been done, and has resulted only in deterioration, not in catastrophe. But how is it for the future, as regards China and the East? Ireland contained a population but of a few millions, and its whole surplus could drain off in a single generation. The population of the farthest East swarms by the hundreds of millions, and presses continually on the extreme limits of subsistence. For unknown centuries, the great dikes of Oriental law and custom have stood high and strong, retaining that unknown flood of humanity within native bounds. Behind those walls, the level of population has risen higher and higher, and has pressed against them more and more severely, but, as yet, they have scarcely begun to yield. For nearly half a century the whole civilized world has been working at those barriers, and undermining them; we want to let trade in, and, in doing so, we are going to let population out. Within the last few years the barriers have begun to yield; within the next half century they will be wholly destroyed, and this vast reservoir of humanity, — semi-civilized, ignorant, Asiatic in blood, manners and morals — will come flooding over the earth. To deplete China of its surplus population is a simple impossibility. The stream of emigration once set in, can only increase, it can never run dry. Neither is this emigration, already firmly established, Christian, or in any way akin to us, or in any sympathy with us, or intellectually approachable by us. It speaks an unknown tongue, and has strange manners and customs; it does not change or assimilate. To it, subject to the naturalization laws, the amendment to the Constitution now pending before the State Legislatures, guarantees the

suffrage. This emigration is now welcomed by the philosophers of the school of material progress as likely to furnish an inexhaustible supply of cheap labor. The same thinkers would doubtless organize an emigration from Sodom and the cities of the plain, could the inhabitants of those industrious communities but import an inexhaustible supply of cheap brimstone with their vices, and dig upon our railways when not corrupting our morals. If, however, Social Science has one lesson to teach more emphatically than any other, it is that the accumulation of wealth is not the loftiest end of human effort.*

Working upon such a mass as must result from the blending of all these incongruous elements, Universal Suffrage can only mean in plain English the government of ignorance and vice:—

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* The apprehensions here expressed, may to many appear excessive. This opinion, however, will not probably be entertained by the dwellers on the Pacific slope. A century, be it remembered, will be but as a day in the history of races on this continent. The Chinese emigration is of ten years date, and already counts fifty thousand living beings. Up to within a short time, it has been confined to males and contained no principle of increase within itself, but this is no longer the case. This paper was read at Albany on the 18th of February; on the 24th the following telegram was published in the papers: "San Francisco, February 23. Some of the Chinese of this city are reported to be armed for a struggle to secure possession of the females who arrived from China on the steamer to-day. The Chief of Police has taken measures to prevent a riot. The Chinese companies are anxious to prevent immoral immigration, but have lately been foiled." It was followed on the 25th by another: "San Francisco, February 24. About four hundred Chinese women arrived by the steamship China. They were taken from the ship under a guard of police to the places designated by the head men. An effort was made to seize some of them, and some of the rival parties were wounded. The police prevented a general fight. Great excitement exists in the Chinese quarters of the city, and several arrests have been made." A flood of light is thrown on this transaction, and upon the general beauties and elevating tendencies of the new emigration, by the following extract from the San Francisco *Bulletin*. These too, be it remembered, are the early developments of the system; the leaf is very far from dry: "The scheme by which the system of importing Chinawomen is carried on, is an exceedingly complicated one. Some time since the six Chinese Companies of San Francisco combined for the avowed purpose of preventing the importation of Chinese girls and women for the purpose of prostitution. The managers were shrewd. They knew the value of a moral support, and set about to secure it. The plan on which they were to work, was published, and the police authorities were enlisted to assist them in carrying it out. On the surface it all seemed right; it appeared to be a very commendable and effective plan for getting rid of or checking a monstrous evil.

"In reality however, it is nothing less than a cunningly devised scheme to effect precisely what was pretended to be opposed. Cargo after cargo of females, mostly young, came over. Some of them had relatives here, and reached them, but the

it means a European, and especially Celtic, proletariat on the Atlantic coast; an African proletariat on the shores of the Gulf, and a Chinese proletariat on the Pacific. One only of these has developed itself as yet and acquired firm political power, — the Celtic proletariat has possessed itself of the New York City Government and will soon be in control of that of the State; — those who wish to study the early development of the system will find ample food for reflection in the daily columns of the New York press. Those who choose may then strive to extend it.

If then the proletariat, — the organization of ignorance and vice to obtain political control, — is destructive both to the purity and significance of the ballot; — if Universal Suffrage inevitably tends with an advancing civilization to bring about

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rest were 'consigned' to certain parties here, who had bought them in China, while others were sold here to any one who would pay the required price. An average consignment was worth to the Chinese from four thousand to five thousand dollars. From the lot a few would be selected and sent back to China, to show the Americans that the plan was a highly moral one and deserved their support. But dissensions and jealousies arose, and the writ of habeas corpus was invoked. The decision of the Fourth District Court exploded the entire system, and reduced the traffickers in women to the necessity of prosecuting their business by the old methods, which, still illegal as the other, had not the outward appearance of a moral movement in aid of Christianity and general social virtue.

"The original plan was to kidnap, and that plan is now being acted upon with bloody consequences. The shrewd conductors are enabled to use and abuse the processes of law for their nefarious purposes; and when these fail, they do not hesitate to resort to murder. Whatever crowd or combination of Chinamen get possession of the women who are being brought here monthly in such large numbers, makes no difference. They are all alike anxious to realize the profits of their sale, and they are large. So lucrative is the business, notwithstanding the little drawbacks of conspiracy and assassination which are encountered, the chiefs are enabled to hire white men to go to the steamers and assist them, paying them from twenty to one hundred dollars for their services.

"Some time since one Chinaman established himself in China for the purpose of shipping women like cattle to this port. His name was Kum Cook. The branch house here encountered obstacles. At the present time it appears that a man named Ah Fook enjoys a monopoly of the traffic, and by shrewd means, on the arrival of the last steamer, he procured the aid of the officers of the law to get and keep possession of his large consignment of females. He first caused it to be whispered in the ears of Captain Crowley that certain parties were going to the steamer's deck, and would fight for the possession of the women, unless a posse were sent down. They were arming, and there was great danger of a riot. The facts proved that a riot was threatened, and it was only by chance it did not occur. However, men were stationed at the gates, and a Chinaman, in order to get through to the steamer must have the Mail Company's pass, with the mark of Ah Fook, 'C. A.' on it. Some who did not have that endorsement, were turned

such a vicious combination, then no one who believes in a Social Science as applied to the study of permanence in free institutions, can place any faith in that form of suffrage. The tendency of the day is clearly in a wrong direction.

A protest unaccompanied by a suggestion scarcely deserves a hearing. Laboring as each of us should and as this organization should, according to our lights; — seeking to affect as we may those present influences which are to control the whole future of our race and our continent, what have we to offer in place of that which we reject? In the first place, justice is to be done. The suffrage must be impartial and we must recognize no insuperable barrier to its possession. Race, color, creed and sex must then at once be excluded from the list of possible

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back. The result was that the three hundred and ninety-six China women were hauled off the dock in baggage-wagons, like so many calves, and taken to the various alleys designated by the head importer. To prevent a successful combination of his rivals, he divided the cargo into three parts, and they were discharged simultaneously at places pointed out by his agents.

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"This is the last development in the case; but the people may rest assured of one thing — the evil described is making rapid progress, and calls for some extraordinary measures for its suppression. It will not do for the local authorities to become indirectly and innocently participants in the horrible traffic. We fail to see why the Chinamen who obtained the three hundred and ninety-six woman last sent, had any legal or moral right to their custody, or why only his friends were admitted through the gates on that particular business.

"One man was engaged by a Chinaman to go to the last steamer from China and procure him a female. The man is a lawyer, and the Chinaman agreed to give him one hundred dollars for the job. We are not informed whether he succeeded. Still another attorney was offered the same price for a similar purpose, and we know of half a dozen or more other Caucasians who are of so much importance in the estimation of Chinamen, and of so little in their own, that they have received or been offered pay to assist in the work of properly distributing Celestial females to the 'consignees.'"

Such is the Asiatic emigration, and such are the progenitors of one large element of our future population. By it the rapid construction of our railroads may be hastened, and our material wealth will be developed; but the contact with such a race will brutalize the inhabitants of the Pacific States more than the contact with the harmless African ever brutalized the South; and what can such a race add to our political stability or moral or intellectual growth? An inexhaustible supply of such labor may prove dear at any price, and even railroads may be purchased for more than they are worth, even though paid for only in manners and morals.

Non tali auxilio nec defensoribus istis
Tempus eget.

tests. They are all tinged with the injustice of caste. Property is not only a test unworthy in itself, but, in this country, where poverty is a vulgar virtue, and where the great General and the large-hearted President are masqueraded in public in the more popular characters of an insolvent tanner and an illiterate rail-splitter, such a test is impossible. Education then only remains. A knowledge of the language of our laws and the faculty of informing oneself without aid of their provisions, would in itself constitute a test, if rigorously enforced, incompatible with the existence of a proletariat. Our efforts should be devoted to the practical development of these two principles of intelligence and impartiality in the suffrage, and of the kindred theory of the just representation of minorities. In the ideal Government, founded on the popular consent, every voice will be audible through a system of perfect representation. No barrier to a purified suffrage will be recognized which cannot be surmounted by the moderate efforts of average humanity, and the highest privilege of the citizen, at once a right and a reward, will be given or refused on principles of even justice and stern regard for the common good.

CHARLES FRANCIS ADAMS, JR.

CIVIL SERVICE REFORM.

A NEW draft of a bill "To regulate the Civil Service of the United States" was laid before the House of Representatives on the 5th of April last by its author, Mr. Jenckes of Rhode Island.

It applies to "all appointments of civil officers in the several departments of the service of the United States, except postmasters and such officers as are by law required to be appointed by the President, by and with the advice of the Senate." (Sec. 1.) A subsequent section includes within the operation of the bill "any officer in the civil service of the United States at the date of the passage of this act other than those excepted in the first section." (Sec. 10.) Farther on, it is provided "that the President and also the Senate, may require any person applying for or recommended for any office which requires confirmation by the Senate, to be examined as to his qualifications, either before or after being commissioned." (Sec. 13.)

The chief feature of the system, intended to apply to the officers thus designated, is a "Board of four Commissioners, to be appointed by the President, by and with the advice of the Senate, who shall hold their offices for the term of five years, to be called the Civil Service Examination Board," whose most important duties are to prescribe the qualifications and to provide for the examination and probation of candidates for office. (Sec. 2.) The examination being passed, a period of probation, during which the tenure of office is conditional, is determined by the Board. This probation being passed, it is ordered that "the applicants who stand highest in order of merit" shall have "the preference in appointment." A vacancy may be filled "by the senior in the next lower grade," or "by the successful competitor under a new examination for that particular vacancy." Seniority is described as depending on the rank obtained at examination, "having regard also to seniority in the service." It is expressly stated that "promotions may

be made on account of merit, irrespective of seniority in service, such merit to be ascertained by special examinations." (Sec. 3.) In conducting their examinations, the Board are authorized to call to their assistance "such men of learning and high character, as they may think fit, or, in their discretion, such officers in the civil, military, or naval service of the United States, as may be designated from time to time, on application of the Board." (Sec. 6.)

It is also provided that the Board shall have power to prescribe "for the removal or suspension of all officers, who come within the provisions of this act, and also to establish rules for the manner of preferring charges for misconduct or inefficiency, and for the trial of the accused, and for determining his position pending such trial." (Sec. 5.) The power of the President to revoke an appointment is recognized; but, upon such revocation, the officer removed is entitled to a trial upon his demand. (Sec. 8.)

The only other provision of primary importance in the bill is "that all citizens of the United States shall be eligible to examination and appointment." (Sec. 12.)

Such is the substance of a bill, which more than any other now before Congress, demands consideration, not only from that body, but from the people of the United States. Indeed, it must be considered by the people, before it will be seriously considered by Congress. The impulse to its passage must come from the nation. They are gainers, and only gainers, by the enactment. Their Representatives at Washington seem to regard themselves as losers. The chink of the grasshoppers, as Burke would say, is importunate, while thousands of great cattle still chew the cud and keep silence; but the field is theirs, not the insects', after all.

Mr. Jenckes introduced his bill in the following terms:

"At the opening of a new Congress, on the threshold of a new Administration, I propose to present for a third time a bill for a reform in the Civil Service of this Government. It has been relieved from the departmental machinery which was believed to be necessary for its efficiency, when it was reported for a second time in the evil days of the last Administration, and is reduced to the simplicity of the original proposition. It is presented as a practical measure to enable the Administration to get its business done most effectually

and economically. It simply provides means for obtaining for the service of the Government in its subordinate offices, the best quality of servants to be obtained for the price paid for their services. That such a result is desirable has never been questioned; that an approximation to it can be obtained is generally believed; that an improvement in the present condition of the service is practicable, no one doubts. Any scheme which holds out a reasonable prospect of improvement ought to receive favorable consideration even by those who believed complete success unattainable. No one who has hitherto spoken upon this subject in this House has denied or questioned the existence of great demoralization in the civil service. Every one expresses a desire for reform, and a willingness to coöperate with any measure that offers plausible evidence of improvement. But no one has proposed any such general measure, or even indicated its outlines, or the possible theory upon which it should be framed. In the absence of any such measure to furnish a remedy for an admitted evil, I still venture to press mine; but I stand ready at all times to yield and to give my support to a better; and if the result that all desire shall be attained in any way, my satisfaction will be as great as if the scheme now proposed should be adopted."

The spirit of these remarks is commendable in the highest degree. Without dogmatism, without resistance to observations either from friendly or hostile sources, Mr. Jenckes brings his measure to the light and abides the result. In this speech, as in several speeches previously made, he notices the objections to his measure, and deals with them more or less successfully, but always in the same unpresumptuous temper. We speak of the spirit thus exhibited, because we regard it as an extremely opportune qualification in the framer of a bill so sure to encounter opposition from many quarters.

The bill itself is certainly not above criticism. In the first place, its language is very far from being simple and precise, so that it is not always easy to understand the nature or the working of each particular section. It would not be amiss to subject the document to literary revision, before it is finally brought forward for legislative action. In the second place, the principles it sets forth are not always as fully developed as might be desired. Perhaps it is impracticable to go into much further detail in regard to them, and even if it is not, much must still be left dependent upon the Board created by the bill,

and upon the rules adopted by that body for their own conduct, as well as for the conduct of the Civil Service. Indeed it is for the Board, should it be established, to decide whether reform is to follow; the question cannot be decided by any act of Congress. Admitting all this, one may still regret that the bill is not more exact in defining the great principles, either of examination or of probation, on which the system is to depend in theory.

A graver defect in the measure is perhaps an unavoidable one. It deals, as its author states, "only with the inferior officers, whose appointment is made by the President alone or by the heads of Departments. It does not touch places which are to be filled with the advice and consent of the Senate. It would not in the least interfere with the scramble for office which is now going on at the other end of the Avenue, or which fills with anxious crowds the corridors of the other wing of the Capitol. It relates only to the appointments which may be made in secret, which seldom meet the eye of the reader of newspapers, but which are a hundred-fold more numerous than those which await the confirmation of the Senate, and without which the Government could not be carried on. When I speak of candidates and officers it will be understood that I refer only to this subordinate class; those which long custom has held to be the sport of the political whirlwind cannot seek shelter under this measure." The President and Senate have the option, as has been observed, of requiring any candidate for offices in their gift, to be examined. But a point so important as this, should not be optional. If nothing obligatory can be added to the bill itself, in order to reach the other wing of the Capitol, then another measure should be introduced there. The Senate have the constitutional power to make their advice and consent to all the higher appointments dependent upon such conditions in respect to examination or probation, or both, as they may see fit to adopt. A resolution embodying some rules and regulations to this end, may be laid before the upper house at the same time that a bill for the reform of the Civil Service is laid before the lower. Whatever is inevitably defective in the latter, may thus be repaired in the former, and then the Service will be thoroughly reformed. To any system of examination or probation, there

must be exceptions in individual, perhaps also in classified cases. Many men who are the best qualified for our higher offices, would feel it a humiliation to have their qualifications demanded of them. Nor could they be examined, even if they would, by Commissioners of probably inferior abilities and attainments to their own. The rule should be general, and then it may be safely waived in all exceptional instances.

Whatever reservations suggest themselves, the bill before Congress deserves the respect of every disinterested citizen. If it does not accomplish all, it accomplishes much that is to be desired. It is the first step in the right direction. It opens the way to efforts as large and results as complete as the fulness of the cause demands. To carry it, is to carry far more than the bill itself.

Is it worth while to offer proofs that the reform is required? The American people cannot be blind to the facts before them. Turn whither they will, they see their offices the spoil of partisans, the prey of adventurers, the recompense of weakness and corruption. Every department of the administration suffers, every resource of the nation is impaired in consequence of the manner in which appointments to public office are carried. It is out of the question that places so filled should be administered for the common good. Events too fresh to need recalling, demonstrate the futility of relying upon any party or any leader to remove the ills to which our Government is heir. Long existing abuses are always beyond the reach of surface treatment. The only effectual mode of dealing with them is by an organic change in the system under which they have arisen.

So much for the necessity of the reform. Its practicability has been tested in other countries, especially in Great Britain. The Civil Service Commission, established there in May, 1855, began with framing a body of rules, by which the qualifications of candidates for public appointments were defined as to age, health, character and education. Upon the last point, the requirements varied according to the branches of service, lowest for the Post-office, and highest for the Colonial and Foreign Office. It is in relation to the educational qualifications, that most of the objections against the English system have been made. Its opponents have argued, on the one side, that the literary attainments of a candidate are altogether

secondary in importance to his practical ability, and on the other, that men of superior education are brought into offices where their attainments are wasted in merely mechanical duties. Here, however, as at every other important point, a moderate degree of elasticity in the regulations of the Service is sufficient to obviate most of the apprehended evil. The English Commission, finding that their examinations were efficient just in proportion as they were competitive, soon made competition the centre of their system, and the experience of every succeeding year has confirmed their early judgment. They have also attached more and more importance to the probationary character of their appointments. "In reporting upon the competitive examinations which have taken place under our superintendence," say the Commissioners, "we feel it to be our duty to avow our continued conviction that the selection of persons for junior situations in the Civil Service by competitive examination, combined with the proper conditions as to age, health and character, and with the check of a period of probation, and with promotion by merit from class to class, is the best mode of providing for the public service." That these conclusions have been sustained by public opinion, appears very strikingly from a resolution of the House of Commons: "In the opinion of this House, the experience acquired since the issuing of the order in Council of the 21st of May, 1855, is in favor of the adoption of the principle of competition as a condition of entrance to the Civil Service."

We have recent and remarkable evidence of the favorable impressions produced by the reform of 1855. Mr. Jenckes had but just introduced his new bill in the House of Representatives, when, on the 9th of April, Mr. Fawcett moved a resolution in the House of Commons, that all appointments to the Civil and Diplomatic Services ought to be obtained by open competition. To this bold assertion, reaching high above the appointments hitherto made on the competitive system, and extending from the Civil to the Foreign Service, no insuperable objection appears to have been made. Mr. Gladstone, though urging Mr. Fawcett to withdraw his motion, and pleading that the Government had been too much occupied with other business to take up this question, admitted that the motives for proceeding further in the direction indicated had

of late increased in strength. "I make this admission frankly," he added, "for the purpose of showing that the Government are alive to the importance of the point, which they will bear in mind when they proceed to take the subject into consideration. . . . . As the Government wish rather to rely upon what they perform, than upon what they promise, they trust that the House will give them a reasonable time to see whether they are or are not disposed to act upon the principle, of which they have already announced their approval." Mr. Fawcett's motion was thereupon rejected. It was too sweeping a measure to be effective, and its defeat, in the circumstances, ensures rather than prevents the object at which it aimed.

In this experience of Great Britain, we find our warrant for believing the reform of the Civil Service to be practicable. In the experience of our own country is the warrant for believing it to be indispensable. Year after year, administration after administration, the Service improves in one country and deteriorates in the other. It seems as if these premises led straight to the conclusion that the reform of the American Service ought to be no longer delayed.

To perfect the reform, it should be made one of principle as well as of organization. The bill before Congress may be ever so much improved, the board which it establishes may be ever so efficient, and yet something will be wanting, so long as public sentiment wavers concerning the true standard of administrative fidelity. We are yet to convince ourselves as a nation, that the purpose of public office is to serve the country, not the party, not the office-holder; and that, such being its purpose, its tenure should be independent of patronage, independent of all partisan tactics and personal influences. We are also to understand more fully than we have ever done, that those whom we place in office should be selected according to their fitness, both in character and in education, and that so long as they continue fit, they should be secured in the posts they occupy. A deeper sense of the importance of preparation for administrative duties must penetrate the popular mind. Running for luck is a course as dangerous to the man who takes an office, as to the office itself. He meets with difficulties he cannot remove; he falls into snares from which he cannot extricate himself; and long before his term ends, he is apt to

wish that it had never begun. For his sake, for the nation's sake, he should be educated at least so far as to be equal in himself to the duties which he undertakes, and if in some respects superior to them, it is all the better for him, all the better for the nation. There is scarcely an office under our Government, that would not be more faithfully, as well as more discreetly administered, were its occupant more fully instructed in the elements of Social Science, that is, in the principles at the foundation of society. One sometimes wishes that as the country possesses a training-school for its Army, and another for its Navy, so it might establish a third for its Civil Service. If this cannot be, then let the local schools give more attention to those studies which fit men for their social duties, and open to them a public career upon which they may enter without fear of disappointment or disgrace.

The question before us reaches beyond all political considerations. It may be described in part as constitutional. That august clause with which the Constitution begins, "We the People of the United States," has been slowly sinking into the fact, if not the form, We the Politicians. If there is any thing to restore its original effect, it is a reform which sets the politicians on their level, and the people on theirs. The question is also a moral one. Whatever the distinction, or the want of distinction between right and wrong in a Government, the same prevails under the Government. Public and private standards are never long conflicting, and the duty of a public man cannot be regarded in one light, and the duty of a private man in another. If we tamely consent to the sway of fraud and crime over our Civil Service, we are preparing for submission to the same sway in all the relations of life. Where, we may sadly ask, is the sacred honor which our fathers pledged to one another at the birth-time of the Union? The Union is safe, our lives and our fortunes are safe, the precious memories of those who fell in our defence are safe, but when we see the things now passing, and look toward those which seem to be coming, we are tempted to change a word in the phrase of Francis the First, and exclaim, All is saved except Honor.

SAMUEL ELIOT.

ON SOME TOPICS IN CRIMINAL LAW.

READ BEFORE THE JURISPRUDENCE COMMITTEE, BOSTON, APRIL 12, 1869.

THE service rendered by penal laws to Social reform must, for the most part, be indirect. For they assail effects rather than causes. They attack the branches more than the root of evil. They curb the hand more than the heart. The service, however, though indirect, may be great, in withdrawing temptation, in removing suggestion, in cutting off tradition, and in intercepting infection. By waging war upon the tares, they give the wheat, where there is any, a better chance to grow. But even in this indirect work they cannot keep far in advance of current opinion. They lean on the sentiments that nerve the better part of society against the toleration of crime; and they must be so framed and worked as to fortify, or at least not impair, those sentiments. It is of vital moment that indifference, stupefaction, or patience as to crime, should be in every way discouraged.

Penal laws should not, in form or in act, in their provisions or in their agencies, cool the retributive zeal of society. They may direct and regulate it, but they should not try to supersede it. The idea, one might almost say the instinct, of expiation or atonement, whatever aspect it may present to the philosophic jurist, has a hold on the popular mind that it would be folly to loosen. A feeling that prompts and enables the individual citizen to identify the interest of the community with his own, is an ally of law and order that the friends of law and order can ill spare. It is not only conservative, but actively conservative. The cry that crime must be followed close by penalty, that justice must be satisfied, that law must be vindicated, is, in spite of the wildness to which it sometimes runs, the best special constable. It is least wise to discountenance it in an orderly community, where it is most under wholesome restraint. Without it the most perfect police in the world must lose the scent. The moment the population of a crowded district, the members

of a peculiar community, or the organs of a wide-spread association sympathize with the offender more than with the law, the most patient and crafty detective is baffled. The policeman succeeds by dividing society, and using its better part against its worse. What could he do, were a fiendish freemasonry to usurp the place of loyalty to law in a quarter or section of a numerous community, and supplant statute legislation by an unwritten code that exacted a servile submission under swift and barbarous sanctions? Acts of attainder issued by irresponsible bands smite more surely than the law, for they are backed by hoarded hate or long-chafed appetite. The melancholy history of Ireland furnishes signal examples of this. On the other hand, something more sober and solemn than savage passion rallies a neighborhood against the perpetrator of an outrage that has struck it with astonishment and horror. To weaken or lower this sentiment is thoroughly unsafe.

This uncapitulating revolt against crime is the more needed, when our modern press, by pouring the details of distant enormities into every corner of the land, is doing in a broad way what the Newgate Calender did in a narrow way. The morbid anatomy of sin has become the daily entertainment of multitudes. Prurient fiction and coarse fact are sapping the modesty of the imagination. The young mind is early introduced to the second product of the tree of knowledge. Whether a thirst for the punishment of crime is likely in any high degree to coexist with such familiarity with crime itself, may well be doubted. For the danger of corruption is not all. Scepticism as to the possibility of extirpating or controlling so vast a mass of iniquity is a natural result. The passive reader smokes his lazy cigar as comfortably over a horrid picture of depravity as over the last paragraph about the last play. He acquiesces in crime as a necessary effect of natural laws. He is less sure that man is doomed to be punished for sin than that he is doomed to commit it.

May there not be a tendency, in our present treatment of criminals, to tear off the veil, that (under due limitations) adds much to the undefined terror that ought to surround the idea of heinous crime? The execution of some famous ruffian is heralded by a scene in the convict's cell, to which "a gen-

tleman of the press," and soon, of course, the rest of the world are admitted. The execution itself is nearly private, so far as spectators are concerned, but the inevitable reporter is there also, and in a few hours will turn half the households of the region into virtual witnesses of the spectacle. We carefully wall in our convicts, and every Thanksgiving season we allow the world to be informed that they have had a better dinner than nine-tenths of the innocent poor. This, to be sure, is a reaction against ancient cruelty; but may we not, in striving to get prisoners recognized to be men, overlook the fact that they are dishonored men, and the importance, in general, of secluding their affairs as well as themselves, after having made due provision for the visits of responsible supervisors and charitable instructors? The first and foremost thing a prison should suggest is the burden of guilt. Whatever comforts may be admissible within, the world without need not be treated to an exhibition of them.

A weak or wanton use of the pardoning power tends to lighten the dread of crime. To borrow an old figure, — if you leave one of the hundred gates of Thebes open, it is of little account to bolt the other ninety-nine. As soon as the chance of pardon becomes calculable, it is calculated. Easily remitted penalties accustom the mind to exceptions, and wean it from rule. Forgive and forget go readily together. To pour on example with the right hand and then wipe it off with the left, is a process that requires uncommonly good reasons to recommend it. Pardon in its proper use is not the opposite, but the supplement of justice. It helps out law by equity. The power is not a perquisite of office; and the exercise of it is no favor. A pardon should no more be given away than it should be sold. Easy charity has no place in such an act. It is a case in which mercy is a trust. In this country is the exercise of this power sufficiently guarded everywhere by legal checks? In its nature it is discretionary; but discretion will bear to be hedged about by responsibility. In some States of the Union the pardoning officer or body must report in writing to the Legislature, at the next session, every case of pardon with the reasons for granting it. This looks like a salutary restraint. It is hardly possible to conceive that any reasonable act of clemency should shrink

from open day. If to the statement of reasons were appended the petitions and the names of the petitioners, the publicity and consequent accountability would be only the more complete. In the case of convicts relieved of a portion of their term of punishment, such safeguards are eminently desirable. The presumption being against the relief, the burden of publicly proving its expediency ought to rest on the authority empowered by law to judge of that expediency.

Judicial sentences might, perhaps, be more impressive, if greater method and system were apparent in the awarding of them. Discretionary power, though not under dictation, ought to be under reason, and to be so exercised as to justify itself. If the rationalé of this discretion could be more fully stated and clearly understood, the public might be less at a loss than is sometimes the case. The ordinary reader of a newspaper is occasionally puzzled by seeming inconsistency in point of severity between different sentences, or want of proportion between the facts reported and the penalty imposed in single cases. It is bad to let in the doctrine of chances; tempted men trade on it; it is bad, too, even to seem unnecessarily to ratify or emphasize the hard inequalities of human conditions. When a poor wretch goes to jail because he cannot pay the fine that a rich sinner tosses down and forgets, the lesson is an unedifying one. Might not the law so far extend the judge's discretion, as to authorize him to let the prisoner in such instances work out his fine at wages in the House of Correction, or, in cases of peculiar hardship, under police supervision outside? The justification of judicial discretion lies in the fact that grave mistakes are more likely to be avoided, under the apportionment of penalty to offence by an experienced magistrate after the fact than by subtle legislative discriminations before the fact. Some extension of this discretion might, perhaps, not be unsafe in certain classes of cases of a much more imposing character than those just mentioned. The increasing acceptance of wealth, if not as the highest good, yet as the indispensable goal, or at all events the multiplication of the opportunities of acquiring wealth is apparently beginning to dull the sensitiveness of the community as to the character of the means by which it is acquired. Quantity vouches for quality. And this

tolerant view seems to be reënforced by a growing worship of broad and showy effect, and of any bold and venturous stroke. The adoration of smartness is not the least punctual of our devotions. He that can bluff off, laugh down, or quite ignore scruples, has gained a smart victory over one more obstacle. A counterfeit reputation circulates in consideration of good money. Things being so, it must be unwelcome to have judgment stalk into the preserves of prosperity. It is as when pestilence presumes to mount from the dunghill to the castle. A neighbor's frailty is too close a lesson. The suggestion is startling. Courts of justice can, of course, do little directly to counteract such tendencies. The near prizes outglare the far off penalties; the pleasing possibility of the one flatters hope more than the repulsive possibility of the other rouses fear. A judicious assignment of a modest percentage of questionable gains to some institution of benevolence or learning seems to the community a brand plucked from the burning. The future buys off the past. It is a cheap insurance of toleration. Still, what can be done ought to be done. The judge's stern deafness to appeals founded on previous conventional respectability is one of the chief bulwarks of social and professional integrity. Cannot more be done to fortify the bench? Cannot the law strengthen the toils it spreads for our beasts of prey? Are the penalties denounced against the delinquencies of fiduciaries, severe as in many respects they are, heavy enough? How would it do, for example, to authorize the courts in flagrant cases, to turn over to a receiver the effects of a convicted swindler, to be retained till every fair claim growing out of his fraudulent transactions, were, to the extent of those effects, satisfied?

As to one class of offences the law can ill afford to be forbearing. An open dealer in articles of food, in remedial drugs, in merchandise of prime necessity, is virtually a fiduciary character. He is an agent of the community, if not appointed, yet accepted and trusted by it, and that at his own seeking. The penalties on adulteration (at least in Massachusetts) have scarcely kept pace with those in other forms of deliberate depredation. And depredation tells but half the story. The offender may be also, to all intents and purposes, a poisoner in

a small and slow way. On no point, perhaps, is the average selling conscience less quick and more composed than on this. Men who cannot translate *caveat emptor* give a good part of their years to a living commentary upon it. It might adorn the panel of more than one family coach. To dull natures of this sort, which perceive crime when they feel its penalties, the law might venture to make the sensation a little sharper.

Opportunity not only tempts to crime, but familiarizes with crime, till at length even its unmasked ugliness ceases to disgust. It should be a fixed object of criminal law, to put every possible obstacle in the way of the colonization and multiplication of a criminal class in our great cities. When such a caste has been formed, and has settled in a quarter or district, the minister of the law too often becomes either a foreigner and public enemy, or a helpless bystander. He rarely finds a traitor in the camp. There is hardly a beam in the house he can use to pull down the rest with. Worse than this. A community has established itself, barbarian in morals but civilized in ingenuity, with a code, manners and obligations of its own. And it is fortunate if the officer of the law does not learn to make terms with the system, or at all events to wink at it. These Alsatians have their professional careers and a public opinion. The wild Bohemian life has its charms for the young, and forces them into a villanous precocity. A centre is formed to which floating crime gravitates, to be shot out again on vile missions. Owing to the greater mobility of our population and the successive displacement of the haunts of crime by decent business and habitation, we are less cursed in this way than some parts of the Old World. But the wonderful growth of our cities is exposing us also to serious dangers. We may, before we are aware, get fastened upon us those pests, which, in an urban world like that of London, it is next to impossible to extirpate, and fearfully difficult to keep within endurable bounds. It is a much more knotty problem how to deal with criminals as a class, than as individuals. Any attempt to solve it abroad may soon, if not yet, interest us also. The "Habitual Criminals" Bill, now pending in England, proposes to sanction by law an experiment suggested and urged several years ago, but resisted then as a departure from that

jealous protection of possible innocence, which has been the boast of the common law. The increasing amount and hardihood, however, of crime in London seems at last to have convinced the public of the need of jealousy in the other direction; and the Bill just mentioned, subjects persons who, by at least two convictions for felony have earned a place in the criminal class, to police supervision, and in some cases to punishment on reasonable suspicion. It also throws the burden of proof on receivers of stolen goods, if previously convicted of any fraud or dishonesty. The working of this policy, if adopted and carried out, may furnish experience not unavailable on this side of the ocean. If persons, reasonably suspected of keeping dens of pollution, could be required to clear themselves, under pain of being ejected, and if their jackals and runners could be put to a similar examination, much might be done to break up old haunts and make the way of transgressors hard. Of course, all such urgent remedies must be administered by very responsible persons, and with great prudence. But Society has at least as good a right to protect itself against its Ishmaelites as they to protect themselves against Society.

HENRY W. TORREY.

PEOPLE'S BANKS OF GERMANY.

THE growing frequency of strikes and the continuous agitation of the labor question of late years in this country afford conclusive evidence, that, notwithstanding the higher wages earned by the working classes, the relations of capital to labor among us, while more satisfactory than on the other side of the Atlantic, are by no means what they should be. Much of the prevailing discontent of our working population is no doubt attributable to the effect of our past and present fiscal policy. But at the same time it is a fact, admitted by all careful students of social economy, that the concentration of the leading branches of industry in the hands of large capitalists has likewise much to do with this wide-spread dissatisfaction. For, while it is true, on the one hand, that the rapid growth of great industrial establishments benefits mankind by multiplying and cheapening production, it is also true, on the other, that this process is injurious to no small degree by increasing the number of dependent producers. The extinction of the class of independent producers with small capital, in consequence of their inability to compete with large manufacturers, is indeed no less a positive evil than the concentration, as in Great Britain and other European countries, of real property in relatively few hands and the consequent increase of landless people. Any practical method then of counteracting the hurtful influence of this characteristic tendency of the age is entitled to the serious consideration of all that have the welfare of the working classes at heart. It is in Germany, that, by dint of intelligent and persistent efforts during the last nineteen years, the great problem of securing to the laboring elements the advantages of capital has been carried nearer to a solution

than anywhere else. And this through the institutions known as People's Banks, of which this article is to treat.

ORIGIN.

The system of "People's" or "Coöperative Banks" in Germany, is the off-spring of one man's intelligence and benevolence. Its creator is Mr. H. Schulze, of Delitzsch, a small town in Prussian Saxony, who now enjoys a well-deserved celebrity in and beyond his native country. A judge of a provincial court in 1848 and 1849, he was obliged by his active part in the events of that revolutionary period to resign his office soon after the triumph of reaction. Moved by the deplorable condition, in which those stormy years had left the laboring classes, he resolved to make the propagation of the principles of coöperation, which had been his special study, the work of his life. No resolution was ever more faithfully kept.

In pursuing his object of improving the material and moral condition of working people, Mr. Schulze steered clear of the reefs and shallows, which have caused the wreck of the various socialistic schools of modern times. The solid basis, on which he built up his coöperative system, was the principle of self-help (*selbsthülfe*). He proposed to transform dependent into independent producers by their adding to the economic factor, which they already possessed in their labor, the other main elements of production, capital with its correlative—credit. The former he undertook to create by the application of the principle, that even small forces may by union become great powers, and the latter by substituting the responsibility of many for that of one.

He commenced to realize his theories as early as 1850. He began on a very modest scale by organizing what was first known as a "Society of Mutual Credit" among the poor mechanics of his native town. The operations of the Society were simple enough. They consisted in the payment by the members of small monthly assessments (one silver groschen — 2½ cents) into a common fund, out of which advances were made to the associates at a fixed rate of interest. The Society was not successful at first and this for the reason, that it relied more on the benevolence of outside parties than on the regular contributions for the creation of a capital. After two years' trial,

Mr. Schulze was brought to the conclusion, that any undertaking of this kind, in order to succeed, must rely exclusively on the efforts and contributions of those directly interested in it. Accordingly the Society was reorganized in 1852, by the adoption of a new constitution, providing, that the common fund should be formed solely from the contributions of members and that no outside subscriptions should be received on any terms. In order to open the way for obtaining by loans the additional means needed to make the Society more beneficial to the members, the instrument further provided for the joint responsibility of all the associates for all the obligations of the Society. The adoption of this vital principle mainly insured the ultimate success of Mr. Schulze's labors. Under the new organization, the periodical contribution of the members was left to their option, except that it could not be less than two groschen (5 cents) per month, and that no member could contribute more than a total of two hundred thalers* towards the capital. The profits were, of course, to be distributed in proportion to the individual contributions. Thus reconstructed, the Delitzsch Society took a new and healthy start, and has ever since enjoyed uninterrupted prosperity.

Encouraged by his success in his native town, Mr. Schulze began in 1853, a systematic and energetic agitation for the introduction of his German coöperative banking system throughout Prussia and the other parts of the old federation. He published a series of *brochures*. He maintained an extensive correspondence. He interested the leading newspapers in his work. Elected to the Prussian Parliament, he advocated his economic theories from the legislative tribune. And he not only propagated his own doctrines far and wide, but he successfully combatted in a long and fierce conflict those of Lasalle and his disciples, who would have the State take the place of self-help as the furnisher of capital to workingmen, and whose vagaries for sometime enjoyed the popular favor to a considerable extent. But, notwithstanding his tireless efforts, his cause gained ground but slowly for some years; and this partly because of the inherent difficulty of introducing reforms of any description among a people naturally so conservative as the

* One thaler — 70 cents gold.

Germans, but mainly because of the want of a connecting medium between the several People's Banks already established. This latter drawback was removed in 1859 through his initiation. In that year, he issued a call for a meeting of representatives of all the People's Banks. The meeting assembled in due time at Weimar, and resulted in the organization of a League comprising all the institutions represented. Another result of its deliberations was the opening of a Central Bureau, under the superintendence of Mr. Schulze, whose functions were to be:

1. To keep the members of the League regularly informed, through a periodical publication, concerning the general progress of coöperation, the condition of the several societies, and other matters of special interest; 2. To represent and promote the cause of coöperation in the press, in legislative bodies, and in all national and international meetings called to consider economic questions; 3. To assist both in the maintenance and development of existing societies and in the foundation of new ones; 4. To establish and promote closer relations between the several societies, by an exchange of reports and by business arrangements, such as the extension of credit to one another; 5. To procure loans for Societies from bankers and others; 6. To keep a register of all the German Societies, and to publish yearly statistical reports of their condition.

As anticipated by Mr. Schulze, the Central Bureau imparted a new and powerful impetus to every coöperative interest throughout Germany, and to none more so than to the People's Banks. It fulfilled successfully all the functions mentioned with a single exception in connection with the yearly statistical reports. These, the Bureau, at the head of which Mr. Schulze continues to this day, has so far been unable to make complete owing to the failure of many organizations to send in their yearly statements. Still the reports, issued by the Bureau, between 1860 and 1868, form a very interesting and instructive series of publications, from which we extract the subjoined facts, relative to the growth, the constitution and the administration of the People's Banks.

GROWTH.

The total number of People's Banks, known to the Central Bureau at the close of 1867, was no less than *thirteen*

hundred and four, with nearly *three hundred thousand members*. The following table shows their growth from 1859 till 1867, inclusive:

Year.	Banks.	Year.	Banks.	Year.	Banks.
1859	183	1862	511	1865	961
1860	257	1863	662	1866	1047
1861	364	1864	890	1867	1304

Although all these banks are registered at the Bureau, but one-half of them have sent in annual reports. The following tabular statement shows, in consolidated form, the number of banks that have made regular returns, together with their yearly gains in members, resources and business, during the period of nine years:

Year.	No. of Banks.	Number of Members.	Active and Reserve Capital.	Amount of Deposits received.	Amount of Loans contracted.	Amount of Loans made to Members.
			Thalers.	Thalers.	Thalers.	Thalers.
1859	80	18,676	276,846	512,350	501,795	4,131,436
1860	133	31,603	528,857	1,322,893	1,069,833	8,478,489
1861	188	48,760	907,213	2,649,036	1,983,441	16,876,009
1862	243	69,202	1,332,438	2,747,577	3,441,033	23,674,261
1863	339	99,175	2,021,250	3,416,220	5,641,820	33,917,848
1864	445	135,013	3,252,757	5,355,265	7,401,317	48,147,495
1865	498	169,595	4,852,558	6,502,197	11,154,179	67,569,903
1866	532	193,712	6,329,504	8,726,518	11,169,011	85,010,145
1867	570	219,358	7,507,085	11,378,570	13,311,669	111,252,134

From this table it appears:

1. That while the number of banks increased only seven-fold, the members increased ten-fold.

2. That the average capital of each bank had risen from 3,460 thalers in 1859, to 13,170 thalers in 1867.

3. That, while in 1859 the capital of the banks was only 27 5-10 per cent. of the total of deposits received and loans contracted, it was 30 4-10 per cent. in 1867, thus showing that their wonderful growth was not permitted to impair their safety.

4. That, while in 1859 the loans made by the banks averaged only 221 thalers to a member, the average in 1867 was over 500.

5. That the capacity of the system to provide the classes, for whose benefit it was specially devised, with the two needed elements of material prosperity—capital and credit—is infinite.

When it is remembered that the institutions comprised in the foregoing table represent less than one-half of the number actually in existence, the economic importance and vast proportions of the system become even more strikingly apparent.

CONSTITUTION.

Every person of good moral character, able to support himself, can become a shareholder. Applications for admission are passed upon by the Board of Trustees, who, with the executive officers, manage the affairs of each bank. Applicants can appeal from their adverse decision to a general meeting of the members. Every member pays a fixed monthly contribution towards the capital. The amount of the contribution varies, but is usually low enough to enable the poorest working man to become a shareholder. The nominal value of shares is from ten to two hundred thalers, but ordinarily ranges between thirty and fifty. The monthly contribution goes towards paying the member's share. It can be increased in the option of members to any extent within the limits of the fixed minimum and maximum. Members can pay up their shares at once, if they prefer. No member can hold more than one share. This limitation would necessarily confine the growth of the Associations, but for the fact, that the number of members is not restricted. It was adopted in order to prevent the capital from being monopolized by a few.

Members are at liberty to retire from the Association whenever they see fit; but they must notify the Trustees of their intention, and their withdrawal does not take effect until the close of the current business year. In most Associations the notice, in order to be valid, must be given from four to six months before the making up of the yearly accounts. Any member can be expelled by the general assembly, on motion of the Board of Trustees, for immoral conduct or failure to meet his liabilities. Retiring or excluded members are only entitled to the amount paid in and accrued dividends.

Their liability as members continues for two years longer. In case of the death of a member, his heirs have no title to membership, but simply to a settlement of his account.

ADMINISTRATION.

As stated, the affairs of each bank are conducted by a Board of Trustees and the executive officers. The former exercise a general supervision, and the latter attend to the regular routine of business. The Trustees are elected by the members in general assembly and stand between them and the officers. They appoint and remove all the officers. All questions of vital bearing upon the future of the Association are decided at general meetings. The details of business management are arranged between the Trustees and officers.

The capital of the People's Banks consists of two funds, active and reserve. The former is derived from the periodical contributions of members, who are credited accordingly. No member can diminish, withdraw or assign to a third party, either the whole or any part of his contributions. The reserve fund is made up from the admission fees, which range from one to five thalers, and from the regular retention of a varying percentage of the profits. Its proportion to the active capital is not uniform, but averages five to six per cent. of the two funds combined, and eight to ten per cent. of the liabilities. The reserve fund can be touched only in case of dissolution, when it is distributed among the members.

Other resources are derived from deposits and loans. These, with the active fund, constitute the working capital.

Members draw no interest on their contributions, but receive dividends from the general profits. The dividends range from four and a half to thirty-eight per cent., but average about twelve per cent. They are only paid on paid up shares; those on partly paid shares are credited to members, until their shares are wholly paid. Deposits are received on time for six or twelve months, and money is borrowed at long dates, while loans are made to members for briefer periods. In this wise the People's Banks can use deposits and borrowed money with perfect safety as part of their working capital. The loans to members vary according to the resources of the several

banks. They range, as shown by Mr. Schulze's latest tables, from the smallest sums all the way up to twenty-eight thousand thalers. Each member is entitled to advances to the amount of his share without security. Further credit can be given him in the discretion of the trustees or officers, but in this case they must require security. If he cannot furnish this himself, his paper must be endorsed by two other members. The interest charged on loans to members, varies between six and fourteen per cent., the rate of the smaller banks being usually higher than that of the larger.

In illustration of the practical working of the system, we give a list of the principal People's Banks in the leading cities of Germany with an exhibit of their business in 1867.*

The most remarkable fact disclosed in this table is the proportion of the losses to the aggregate amount of business transacted by the banks enumerated. While the latter exceeded thirteen millions, the former was less than eleven thousand thalers, or about one-fourteenth of one per cent. The same insignificant proportion is noticeable in the returns of all the other banks, which sent in their statements for 1867. This fact speaks volumes for both the administration of the banks and the integrity of the German working classes.

Through the exertions of Mr. Schulze, a large central bank was established in 1864 in Berlin, with a capital of 270,000 thalers in shares of 200, with a view to facilitate the contraction of larger loans by and the investment of surplus funds for the People's Banks. This institution has proved so successful, that its capital was enlarged in 1867 to 500,000 thalers. The establishment of another fiscal agency at Frankfort on-the-Main with a capital of 150,000 thalers, is in contemplation.

By a reference to the table it will be seen that the business of some of the banks has been entirely out of proportion to their resources. For instance: the Bank of Gera, with a capital of only 39,000 thalers, did, with the aid of 9,405 thalers borrowed money, and 239,706 thalers deposits, a business amounting to 481,411 thalers for the year.

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* See page 136.

That of Crefeld had a capital of only 29,130 thalers, yet operated by means of 179,885 thalers borrowed money and 179,885 thalers deposits to the extent of 474,470 thalers. The Coeslin Bank, with but 9,686 thalers capital, made, on the basis of 128,245 thalers in current deposits, loans to members amounting to an aggregate of 578,446 thalers. These figures, while proving the reliability of the principle of joint responsibility as a means of procuring credit for the banks, indicate anything but sound financeering. Indeed, an overstretch of credit, such as they disclose, constitutes a positive danger, and renders the institutions in question constantly liable to a sudden collapse. Mr. Schulze early perceived this peril, and in 1864 proposed a resolution at the annual meeting of representatives of the banks, to the effect that the proportion of the active and reserve funds to the total working capital should be no less than twenty-seven and a half per cent. The resolution was adopted, and has since been acted upon by most banks. In 1867, an average proportion of thirty and four-tenths per cent. was soon attained. The cases mentioned are really rare exceptions.

It should be understood that the People's Banks were not meant to take, and have not taken the place of Savings' and kindred institutions. They were intended to provide workingmen with the same banking facilities that previous to their establishment were the exclusive privilege of capitalists, and this mission they have certainly fulfilled. They are now universally appreciated as a healthy and powerful factor in the social economy of Germany, and as such have lately obtained recognition and protection from special laws, which distrustful governments long hesitated to grant. A trial of nineteen years having proved them a complete success, they can safely be recommended for imitation in this country.

HENRY VILLARD.

STATEMENT OF THE PRINCIPAL PEOPLE'S BANKS OF GERMANY.—1867.

Societies.	Number of Members.	Capital.	Deposits.	Loans Contracted.	Amount of Business in 1867.	Number of Loans to Members.	Range of Loans to Members.	Interest paid on Loans to Members.	Dividends.	Losses.
		Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.
People's Bank of Delitzsch	545	14,130	5,980	15,154	114,933	734	3- 2,000	$6\frac{2}{3}$	$8\frac{1}{3}$	17
" " " Aschersleben	1046	98,984	none	97,419	966,157	4639	2-12,000	7	8	none
" " " Breslau	2936	110,274	187,797	1,800	918,135	6605	5- 5,000	$5\frac{1}{3}$–10	10	376
" " " Berlin	232	13,452	5,721	none	194,008	2097	5- 1,000	10	10	500
" " " Dresden	1470	119,984	438,999	26,203	698,570	5548	5-10,000	12	not given	none
" " " Freiberg	1472	56,848	275,662	none	1,335,897	5424	5-10,000	7	12	945
" " " Colberg	1193	39,681	83,360	2,000	496,603	3750	5- 8,000	$6\frac{2}{3}$	$7\frac{1}{2}$	none
" " " Gotha	1440	91,334	145,521	138,609	592,239	3372	not given	$6\frac{2}{3}$	$8\frac{1}{3}$	10
" " " Halle	985	90,508	145,225	22,243	431,376	4598	5- 9,200	6	6^{7-18}	1422
" " " Hanover	1341	54,515	none	123,877	272,143	3618	5- 500	7	8	2170
" " " Frankfort (Oder,)	1400	33,001	3,198	47,429	756,187	not given	1-10,000	6 – 8	$9\frac{2}{3}$	787
" " " Rostock	2067	174,430	104,789	325,262	1,950,240	8336	3- 5,500	$5\frac{1}{3}$– 7	8	none
" " " Eisleben	400	114,302	118,350	224,093	1,378,127	5840	3-14,000	6 – 7	12	597
" " " Zwickau	915	53,749	none	360,909	521,011	2889	3-10,000	8	not given	none
" " " Wiesbaden	1950	157,996	235,361	365,651	398,613	1773	10-28,000	$5\frac{1}{4}$– 7	8	none
" " " Leipsic	4224	136,926	133,925	89,889	481,733	4983	3- 6,000	7	10	2367
" " " Gera	846	39,002	239,704	9,405	481,411	2520	2- 5,000	6	10	39
" " " Coeslin	385	9,686	128,245	none	578,446	2028	5- 4,000	7 – 8	$16\frac{2}{3}$	none
" " " Crefeld	565	29,310	99,979	none	474,470	9872	5- 1,200	$6\frac{1}{2}$	10	1366
" " " Mannheim	190	65,478	none	179,885	549,866	3426	3- 3,429	5 – 6	5	none

PROGRESS IN ECONOMIC EDUCATION.

In one of the preceding articles it is stated that a growing importance is attached to Social Science as an element of education in the leading countries of Europe. In confirmation of this statement, we subjoin an account of an important step recently taken by the French Government in recognition of Social Science as a mental discipline.

In the Report of the Imperial Minister of Public Instruction upon higher education, in November last, he recommends the constitution of a section in the "Ecole des hautes études," under the title of "Section of Economic Sciences." This Section was established on the 30th of January, 1869.

We translate in full the regulations for the course of instruction:

Art. I. The instruction in the Section of Economic Science, include in general, 1st. Under Political Economy: The principles of political economy and their applications to social institutions; the history and exposition of economic theories; the history of the gradual emancipation of labor, studied from a personal view and in the light of facts; the history of real and personal property, and that of commercial and industrial associations; the study of vital statistics, and of past and present methods of colonization.

2nd. Under Finance: The different systems of taxation among ancient and modern nations; the general rules observed in the administration of public finances, in the collection of public revenues and their expenditure; the general principles of public accountability; public and private credit in its various applications, either to individuals or to associations.

3rd. Under Law: The general rules of municipal law; the laws and regulations governing trade and agricultural and industrial productions; the statutes and treaties relative to maritime law and international commerce.

4th. Under Statistics: Its applications to the subjects mentioned.

Art. II. No one can become a pupil of the Section of Economic Sciences without having passed an examination.

The examination comprises history, geography, and the elements of political economy and law. The Board of Examiners consists of a member of the Council for the Section, and of two other members selected, either from the Council of State or from the members of the Academy of Moral and Political Sciences, (Institute) or from the Professors of the College of France, or the Law Faculty of Paris. The Minister of Public Instruction designates the examiners.

ART. III. Every applicant in registering, shall indicate whether he desires to follow the whole of the studies comprised in the Section or confine himself to any special course.

ART. IV. The Council for the Section prepares a plan of study for each pupil, and designates among the instructors the particular one who will be charged to see to the carrying out of this plan, and to give to the pupil the necessary guidance in his studies. Every pupil is moreover authorized to apply for advice to the Faculty.

ART. V. The duties of the pupils consist, especially:

1st. In following the prescribed course of instruction, and preparing an analysis of each lecture, which must be handed to the instructor. 2nd. In making researches upon given subjects in the libraries, archives and collections of Paris and the Departments. 3rd. In taking part, under authorization, in investigations connected with the subjects of study. 4th. In translating, analyzing and commenting upon foreign publications within the scope of their studies. 5th. In discussing given subjects in class conferences, to be presided over by instructors. Finally, in studying in foreign libraries and public collections, under the most competent guidance, questions relating to the political economy, economic institutions, the public and municipal laws and the finances of other countries.

ART. VI. The studies of pupils entitle them to marks which serve in grading them for the final examination. A record of the marks is kept by particular instructors, who, at the end of each term, submit to the Council a report upon the studies of the pupils confided to their supervision. The pupils sent abroad, are required to report to their instructor once a month, the progress made in their researches. Such of their labors as may be printed by virtue of the decree of July, 1868, are published under the supervision and responsibility of instructors. Only such pupils are sent abroad as have spent at least a year in the school.

It is gratifying to know that, even before the action of the French Government, a movement was begun to secure the recognition of Social Science as a leading discipline at the oldest University of this country.

At a meeting of the Board of Overseers of Harvard University, April 9th, 1868, the following Report was presented, accepted, and recommitted to the Committee presenting it, with instructions to confer on the subject with the Corporation of the University.

"The Committee appointed 'to inquire and report at a future meeting of this Board whether additional means of instruction should not be provided upon subjects relating to the practical affairs of business, and touching the mutual relations and interests of capital and labor, and the development of national resources,' respectfully Report:

"Your Committee recommend that Lectureships be established in the College which will offer to the students at Cambridge and to the community at large instruction upon the range of subjects referred to in the order committed to them, and present some Rules as the basis of a plan for consideration.

"*First.* Courses of lectures may be established on any subject within the range of the order, to which lecturers shall be assigned annually by the Corporation, with the assent of the Overseers.

"*Second.* Each course shall consist of twelve lectures, to be delivered in Cambridge, open to the senior class and members of the professional schools without charge, and to any other person observing the rules establishing the course, on the payment of five dollars.

"*Third.* The compensation of each lecturer shall be a moderate stated sum, with such fees in addition as may be received from persons not entitled to admission gratuitously,

"*Fourth.* Public notice shall be given of the time and place appointed for each course, with the name of the lecturer.

"*Fifth.* Any person or association presenting ten thousand dollars to the College may designate the subject for one course of lectures annually, and the income derived from such sum shall be paid to the lecturer in such course as the stated compensation.

"If the sum of three thousand dollars can be secured, your Committee advise the immediate establishment of two courses of lectures annually for three years, in order to introduce the plan without unnecessary delay.

"The mode of compensation proposed will show how far the system in foreign Universities of lectures paid by fees, which is strongly advocated by some eminent scholars, is adapted to our institutions. The annual appointment of lecturers will enable the College to invite, from time to time, persons who may have distin-

guished themselves in any special branch, and to unite the observation and training of practical men with the instruction given by professed teachers. The College will offer to young persons, whose means do not enable them to devote themselves to a collegiate education, the opportunity of instruction in branches relating to their future pursuits. And should such Lectureships be ably occupied in the Colleges of the country, we should find a healthy influence exercised upon the discussion of public questions, and the legislation of the country upon practical affairs.

"It is a frequent complaint that our legislation is subordinate to the temporary political issues advocated by great parties. It seems to your Committee that no remedy for this evil will be so effective as the open discussion in the Universities of the country, of the principles which underlie such subjects as national resources, modes of taxation, currency, and commercial relations, by those who have made these subjects a special study. And it is our earnest desire that Harvard College shall omit no effort to aid in disseminating the true principles which govern national obligations and national integrity.

"Your Committee are aware that no definite action can be taken on this subject without the concurrence of the Corporation, and they present these views to the Overseers for discussion, and to be disposed of as they may see fit."

CORRESPONDENCE.

ECONOMIC RESULTS OF THE EMANCIPATION OF SERFS IN RUSSIA.

At the request of the Association, M. N. Tourgueneff, the well-known advocate of Emancipation in Russia, has kindly prepared the following letter concerning the gradual extinction of serfdom, in the great Northern Empire. We translate from the French original.

Paris, March 8th, 1869.

The Proclamation of the Emperor Alexander II., dated February 19th, 1861, while it gave personal liberty to the slave peasantry, also granted to them proprietary rights to the land they occupied, and in the occupation of which they had been obliged to work for the benefit of their masters. The quota of land assigned for every head was fixed at three hectares * as a minimum to be increased in those parts of the country, where there was a great abundance of land in proportion to the population.

But the peasants, though allowed personal freedom, became owners in fee of the land assigned to them under the Imperial decree only on purchasing it of the proprietors, and their obligation to labor for the latter did not cease until after the completion of the purchase. In purchasing, the emancipated serfs were required to pay a sum fixed by law. To render it possible for them to acquire their quota of real property, the Government ordained, that the Imperial Treasury should lend them eighty per cent. of the appraised value of the allotted land. This advance the Government made to the owners in the form of certificates of indebtedness, bearing five per cent. interest, payable by the Imperial Treasury, and redeemable within

* A hectare equal to 2.471 acres.

forty-nine years. The peasants are obliged to pay to the Government six per cent. interest during the same period, the difference in the rate of interest serving to compensate the Government for the principal advanced. The remaining twenty per cent. of the purchase-money was to be paid in cash by the peasants to the proprietors at the time when the bargain for the purchase of the land was made.

The purchase on these conditions was optional with the peasants, but, if the proprietors renounced their claims to the twenty per cent. in cash, then they could insist on the purchase, and the peasants were obliged to consent to it. The emancipated people, it should be stated, have always accepted with joy and gratitude the chance to purchase, whenever their masters offered them an opportunity to buy under this provision of the law. Often in agreeing to purchase, the peasants have stipulated with the proprietors to pay them the twenty per cent. in the course of five or even ten years.

To ensure the small proprietors, who did not own more than twenty serfs and who would have suffered relatively more than the large owners, a sufficient indemnity, the law provided for the purchase outright of their possessions, which were united to the public domain. With the transfer of their estates to the Government, their relations to their serfs became the same under the law as those of the large individual proprietors.

One clause of the Emancipation Act provides that, instead of selling, the proprietors may offer to give up to the peasants at once and gratuitously one hectare of land per head for their own use, and that, if the peasants accept this offer, the Act of Emancipation in their cases becomes complete. In the districts abounding in rich lands, some of the peasants who were not suspicious of their masters, *dona ferentes*, accepted the offer made under this provision, hoping that they would find land to buy or to hire on better terms than the conditions of purchase. But it appears, or at least, so it is said, that they now regret doing so. The opinion of the peasants generally is not in favor of this arrangement, and they call the lots of one hectare "the beggars' lots."

In addition to these several stipulations, the Act of Emancipation gives permission to the proprietors as well as to the

peasants, to make any sort of bargain, mutually and amicably agreed to on both sides, either for the purchase, or for any other mode of acquisition of land by the freed people.

The practical results of this system of emancipation, up to the end of the year 1868, have been officially published, and are as follows:

The number of peasants still held to service, (*relations obligées*,)	3,401,529
Number of freed peasants, ...	6,374,488

The lots of this class have been acquired in the following proportion:

1. By purchase without the assistance of the Government, and by the acceptance of lots of one hectare, as gifts from the proprietors, ... 552,050 souls.
2. By purchase with the assistance of Government, ... 5,282,764 " *

The total purchases with the assistance of the Government amount to . . 18,047,432 hectares, making an average of about 3½ hectares to each soul.

The total sum advanced to purchasers amounts to 477,096,972 roubles.† Of this vast amount only 208,448,203 roubles were used to pay off mortgages on the purchased lands. This heavy indebtedness of the proprietors affords a striking proof of the unprofitableness of serfdom.

We see by these figures that of the ten millions of former serfs, two-thirds have become landed proprietors. Excepting the very small number of those, who have preferred the gratuitous gift of one hectare, to the purchase of three or four hectares, all the other peasants possess each his three hectares, and in many instances more.

There are some peasants who have not been able to obtain the minimum of land — three hectares, and for this reason:

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* The rest of the freed people are domestic servants, who became unconditionally free under the law.

† The rouble — 75 cents.

the law provided, that where the allotment of three hectares to each peasant would leave their masters less than a third of the land, the latter should have the privilege of keeping a third, while the other two-thirds were to be given up to the former, even if they should not thus receive the whole of the three hectares fixed as a minimum. In this case the interest of the purchase-money to be paid by the peasants is diminished in proportion. I myself am in this predicament. I have kept one-third of my property, and the peasants have only received two hectares and a half instead of three, and pay proportionately less interest.

One of the weak points of emancipation, is that the possession of the land is vested, not in individuals, but in communities (communes.) According to immemorial usage, all the real property occupied by individuals in the rural communities of Russia has been always and everywhere considered as belonging to the community as a whole. The members of the communities had each the right of cultivating for his own profit a certain portion of the common land. Wherever an organized administration prevailed, a tenant was allowed to hold his lease for a term of years. But in other communities, the peasants, regardless of their own interests, often changed the distribution of the lots, and thus prevented the proper cultivation and improvement of the soil.

The Emancipation Act has respected the communal tenure, and could not well have done otherwise. For, this order of things much facilitated the whole work of social reconstruction, the administration having less difficulty in dealing with the communities than with individuals. At the same time, the Act was not intended to perpetuate this tenure, and so it provided that the land of the communities could be divided among the inhabitants, if the majority of them desired it.

The inhabitants of the communities were, and continue to be treated as a whole, concerning the payment of taxes, and every other public obligation, including the liability to furnish recruits to the army.

Thus the peasantry, liberated from servitude to their masters, continue to be veritable *adscripti glebæ*. They cannot separate from the communities without the formal consent of the com-

munal assembly, except on paying, according to a special clause of the Emancipation Act, their share of the interest on the Government advances for the whole period of forty-nine years.

This *adscriptio glebæ* is to cease, however, with the year 1870, when the law gives the peasants the option of separating from the community by renouncing their right to any portion of the communal lands. On renouncing the cultivable land of the communities, the peasants are entitled to their houses and vegetable gardens, by paying to the community a certain sum as purchase money. In this case the land abandoned by the peasants returns to the landed proprietor.

This power of acquiring a perfect independence is not vested in those peasants who have already by purchase acquired their lands in fee; they must remain in the community until the purchase money is entirely paid. But one-third of all the freedmen, therefore, will be able to profit by this permission of the law to separate from the community. Even of this third it is probable that as many as live on poor soil, the products of which do not repay the expense of cultivation, will not fail to give it up.

The greatest drawback to the Emancipation Act is that the peasants pay very dear for the land which has been granted them. Doubtless the land has been appraised at its real value, but that does not prevent the payment from falling very heavily on the purchasers. In other countries, where peasants have been obliged to pay for their land, the price demanded is much less. In Austria, for example, the appraisement of the rents and personal taxes has been put far below the real value. The peasant only paid a third of the sum representing the appraised value of his obligations to the proprietor; another third was paid to the proprietor by the public treasury, and the last third fell on the proprietor himself, who consequently lost it. It appears from a statistical table, showing the operation of the emancipation law in Bohemia, that a peasant, to whom thirty or thirty-five hectares of land had been granted in fields and woodland, has been discharged from further liability on paying in all only two hundred florins (one hundred dollars.)

In the kingdom of Poland the peasant, on being vested with the ownership of the land that he occupied, became subject to

the payment of double the current taxes during forty-two years. What was due to the proprietors in addition to this, was paid out of the taxes levied on the other classes in the kingdom and by the sale of the public lands.

The method of Emancipation, adopted in Prussia in 1809 under the Ministry of Baron Stein, should especially serve to instruct and guide Russia. It is Prussia which first connected emancipation of the persons, so to speak, with that of the soil. Previously only personal liberation had been thought of. A commission, composed of very able men, was appointed in that country to draw up a plan of emancipation. The celebrated historian Niebuhr belonged to it. The commission commenced its work with the peasants living on the Government lands. It was decided at first that the lands occupied by them should be granted to them in fee. But subsequently some of the commission became of the opinion that, in view of the deplorable state of the Public Treasury, it would be no more than just to require peasants to pay for the land granted to them. The question was submitted to the Prime Minister, Baron Stein, when that great statesman gave his opinion to the effect, that the Government would gain infinitely more, if the peasants, upon becoming owners of the land cultivated by them, employed their little capital in its improvement, and in increasing their general prosperity. The peasants gained their cause and received their land gratuitously. According to the plan for the emancipation of the peasants living on the land of the large proprietors, which was elaborated subsequently by the same commission, the peasants holding temporary leases (corresponding to tenure at will) were obliged to abandon to the proprietors one-half of the land which they occupied and for which they had performed task-work. In giving up this half to the proprietor, the peasant farmer freed himself from all obligation of labor or of rent. The other half, including the house, became the peasant's freehold. He obtained at the same time the right of buying the half which reverted to the proprietor; and, in order to facilitate the purchase, the Government lent him the necessary money. The hereditary peasants, whom the proprietors could not turn off, kept two-thirds instead of one-half. This plan was nobly executed by the celebrated Chancellor

Prince of Hardenberg, who succeeded Baron Stein at the head of the Prussian Ministry. To apply the Prussian method in all its details to Russia, was no doubt impossible in view of the entirely different circumstances in which the peasants of the two countries were placed. But useful lessons might have nevertheless been drawn from the Prussian example.

In Russia, for the lot of three hectares which each peasant received, he has to pay nine roubles a year for forty-nine years. If he had a son born before the last census, he received two lots and must pay eighteen roubles a year. If he has three sons, which is very common, he must pay twenty-seven roubles — a very heavy burden, considering his resources and the other taxes, amounting to nearly five roubles a head, to which he is subject. The drawbacks, which I have noticed, were the natural consequences of the adoption by the Government of the principle of conceding to the peasants lots of land, equivalent to the land they occupied as serfs, and of compelling the peasants to pay for them.

To avoid these drawbacks it would have been necessary to diminish the size of the lots about two-thirds, and to adopt the principle of their gratuitous distribution to the peasants. A gratuitous concession so moderate would only have been a decent and moderate remuneration for the gratuitous labor of the peasants during more than two centuries for the benefit of their masters. It would not have ruined these latter; it would even have been profitable to them, for they would have found around them free men, who, not having land enough of their own to support them, would have always been disposed to work as free laborers on the property of their former lords.

If the Government, in choosing to grant small lots, had not wished to deprive the proprietors of all remuneration, it could and should have caused this indemnity to be paid out of the Public Treasury. The sum required for this purpose would have amounted, according to my calculations, to three hundred millions of roubles, wherein I include an estimate for the purchase by the Government of the whole of the lands of small proprietors.

Accident permitted me in some measure to bring my views of emancipation to a practical test. In 1859, nearly two years

before the publication of the Imperial manifesto regarding emancipation, I acquired by inheritance a landed estate in one of the most thickly settled provinces of the empire and went to take possession of it. I told my peasants I intended to make an agreement with them to settle our mutual relations for the future. The provisions of this proposed agreement I explained to them at length. The Russian Government was then already occupied with the question of emancipation. A commission had been charged with drawing up a plan. This the peasants knew; but no one knew what would be the result. Hence I felt bound to add a clause to my form of agreement, declaring that if the offer of the Government appeared to the peasants more advantageous to them, they were at liberty to accept it. Our agreement was to the following effect:

1. I renounced all my rights over the persons of the peasants, and acknowledged them to be free, as far as the law allowed.

2. I abandoned to the peasants one-third of all the communal land, including their houses and gardens.

3. The houses and gardens were to form the personal property of their actual possessors, each lot comprising about one-half a hectare. The rest of the third given up was to be the property of the community.

4. The remaining two-thirds of the estate, with the exception of my house, garden, ponds and woods, were given up to the use of the peasants. For this use, they agreed to pay me the same rent as before, viz.: twenty roubles a year for each family. On the day named for signing the agreement, I invited the Marshal of the Nobility of the district to come to my house. The peasants were all present. The agreement was read, the Marshal asked the peasants whether they gave their consent to the agreement and to all its clauses. The peasants declared that they consented, expressing at the same time their joy and gratitude. After that we signed the agreement — myself, some peasants in the name of the community, and lastly the Marshal as witness and representative of the authorities.

The difference between my agreement and the Emancipation Act was that the first granted the peasants small lots, and the second large lots. My system was as favorable as it can be in Russia to freedom of labor and domicile, while the system

adopted eventually by the Government continued to hold the peasant in many respects as a fixture to the soil, besides imposing on him an oppressive tax for the space of forty-nine years.

Still it must be admitted that there was a reason for the adoption of the system of large lots, to wit: the eager desire of the peasants to possess as much land as possible. "We belong to you," said they to their masters, "but the land belongs to us." One must not suppose, as some socialistic dreamers have said, that the peasants pretended or pretend still to the possession of all the land that they cultivate. They only wished to obtain that which they have always cultivated on their own account, and this they insisted upon. It was evident that they would have resorted even to force to obtain this land. At the same time the peasants expressed themselves always and everywhere ready to pay their master an indemnity for the land given up to them.

And here let me pay a well-earned tribute to the elevated feeling of justice and generosity which, to his everlasting honor, the Russian peasant manifested during the progress of emancipation. The idea of claiming compensation for his gratuitous labor, during two whole centuries, never occurred to him. This very noble and generous disposition on his part is ill-requited by overloading him with a heavy burden, and condemning him to carry it for forty-nine years.

N. TOURGUENEFF.

GENERAL INTELLIGENCE.

1. Home.

Extension of Public Libraries. — At the suggestion of several members, specially interested in the subject, the Association, through a Sub-Committee of experts, have undertaken a work which, it is confidently believed, will encourage and facilitate the establishment of Public Libraries throughout the Union.

The Committee will attempt for this country something analogous to what has been accomplished in France, by the Société Franklin. The Société Franklin was established in 1862 under the direction of M. M. Boussingault, Jules Simon, Ed. Laboulaye and other distinguished literary and scientific men, for the purpose of facilitating the formation of Public Libraries in France, and has been in successful operation ever since. To this end an office was opened in Paris for the collection and distribution of information likely to be of service to such enterprises, and a pamphlet issued giving some general hints as to the organization and management of Public Libraries together with a Catalogue, which might aid persons charged with the selection of books in making their choice. The Society offers to supply any of the books upon its list at a discount from the regular shop-prices, and to assist in forwarding them. It also endeavours to keep in communication with any libraries that may be established, and to make their experience available to the public and to each other. It is ready to act as an intermediary for the distribution of books which the donor may desire to devote to the public use, without having in mind any precise destination for them. In the years 1865–8, the Society supplied eighteen thousand seven hundred and nine volumes to one hundred and ninety-nine Libraries, and also distributed gratuitously among them four thousand and thirty volumes in the period between August 1864 and May 1868, from donations made to the Society for this purpose.

In imitating the action of the Société Franklin, so far as the example is applicable here, the Committee avails itself of the special experience of one of its members, Mr. Justin Winsor, Superintendent of the Boston Public Library, and of other gentlemen, and also of a great mass of information upon all matters connected with library

management, collected by Mr. Winsor, through means of a circular addressed to various libraries throughout the country and also in Canada and in Europe. Its immediate purpose is to issue a pamphlet containing some suggestions which may be of use in the formation and management of Libraries and also a specimen list of books, to be hereafter modified and enlarged, as experience may dictate, with the prices at which they may be obtained. The hope of the Committee is that a Central Bureau may thus be established under the charge of the Association, to which all persons seeking information upon this subject may apply with the confident expectation of finding here brought together and available for use the experience of the whole country and of foreign countries, and an opportunity of comparing opinions with others similarly interested. The suggestions and Catalogue referred to are now in course of preparation, and it is hoped that they will be ready for distribution before the close of the year.

Art in Education. — Another Special Committee, appointed under the auspices of the Association, has been considering for some time the question "How to promote a better taste among our people." After much deliberation, a definite plan has been adopted, by which, it is thought, this object can be realized.

A list is to be prepared of ten or twelve of the Antique Marbles, which, by the common consent of mankind, are acknowledged to be the best, or among the best, works produced by human art. In order to make this list as perfect as possible, it was deemed desirable to obtain the advice of recognized authorities on Art in various countries. For this purpose, the Committee have entered upon a correspondence with Messrs. Kaulbach and Steinhauser of Germany, M. Couture of France, and the Director of the Kensington Museum in England. Italian Masters will also be consulted, as well as the best authorities in our own country. A comparison of opinions, thus obtained, will, it is believed, enable the Committee to make up as perfect a list as can be devised.

The list being prepared, the Committee propose to put up, in some public school of one of our larger cities, fac-simile plaster casts of the works selected, not as models for drawing only, but as a means of developing, through the constant contemplation of types of perfect beauty, a better taste, in general, among the rising generation.

A petition will soon be presented to the government of one of our principal cities, for the use of a hall or halls in a large school-building, now in course of construction, for this purpose. All that will be asked of the municipal authorities in question, is, that the hall or

halls be put in the proper condition of light and color. It is intended to present the casts to the City agreeing to this.

In carrying out this plan the Committee will necessarily come into correspondence with the workers in plaster in many countries, and they intend to avail of the opportunity to procure lists, photographs, and prices current of their works for the benefit of those who may desire to use them.

The Committee entertain the firm conviction that no better means to improve the popular taste can be adopted than a more general introduction among the people of plaster casts of master-works, which, by their cheapness, are accessible to all.

Illinois Normal School System. — To the State of Massachusetts belongs the honor of establishing the first Normal School in the United States. Led by her example about twenty other States have now made a beginning in providing for the professional training of teachers. But until recently no State had seriously undertaken the development of a *System of Normal Schools*, capable of supplying with competent teachers all the Public Schools of every grade, both in rural districts and in cities. Illinois has, however, now taken the lead in the solution of this difficult and important problem in a way which seems to promise entire success.

The State Normal University at Bloomington was established in 1857, and so rapidly has been its growth, that, in point of numbers, it already stands first among the Normal Schools of the country, while in respect to thoroughness and efficiency it is probably second to none. It has made itself felt especially by creating a large demand for professionally trained teachers — a demand far greater than it could supply. Seeing the superior success of the teachers educated for their work in this institution, the educators of the State took the ground that means ought to be provided as speedily as possible for the special education of all teachers. The State Board of Education, the Chief Superintendent of Public Instruction, the President of the Normal University, and the County Superintendents of Schools seem to be in perfect accord in regard to this matter. The general idea of the plan, which has already taken definite shape, is to reorganize the course of instruction in the Normal University by cutting off all rudimentary work, and raising the standard of requirements so as to make of it a Normal Seminary of high grade; and to establish in each County a Normal School of a lower grade, which shall become to the Central School what the High School or Academy is to the College. The County Normal Schools are to be established, main-

tained and managed by the County authorities, the civil organization of Illinois being such as to render the execution of this plan practicable and easy. The leading objects sought to be accomplished by County Normal Schools are thus summed up by the Superintendent in his last Report: "They are to secure, with the least possible delay, better qualified teachers for the Common District Schools of the respective counties; to bring the advantages of a professional training near to the homes of as many teachers as possible, thus increasing the number of those who will attend, and reducing the expense; to meet the case of the very large number who intend to teach but a short time, by enabling them, through briefer courses of study, to fit themselves for teaching the common branches, by a thorough review of those branches, together with the best methods of teaching them; to establish what will be, in effect, a perpetual local institute of a high order, which teachers can attend a few months in the year, or when their Schools are not in session, and more thoroughly prepare themselves for their work."

These objects cannot but commend themselves to the judgment of all. The movement was begun by Professor John F. Eberhart, the able School Superintendent of Cook County, by whose persevering efforts the first County Normal School was established at Blue Island, near Chicago. The success of the experiment attracted the notice of the press, and of teachers and friends of Common Schools in other parts of the State. Peoria and Bureau Counties soon followed the example of Cook; and in a number of other counties initiatory steps have been taken towards the opening of Normal Schools under the auspices of the County authorities. In some of these short sessions of from four to six weeks have already been held.

At the last annual meeting of the State Association of County Superintendents of Schools, a Committee from that body was appointed to petition the Legislature for the additional legislation deemed necessary to give full powers to the County Supervisors to levy and collect County taxes, for the support of County Normal Schools, and to appoint County Boards of Education to control and manage such schools, and to provide for the uniting of two or more counties for the establishment of a Normal School, should it be found desirable in some cases to do so. The State Superintendent of Public Instruction, Hon. Newton Bateman, one of the foremost educators in the country, has entered into this movement with much zeal, in the full belief that it affords the most feasible solution of the great problem of a supply of better teachers. From present indica-

cations, it appears probable that the hundred counties of the State will soon be engaged in a sharp competition for Normal Schools.

We call attention to this movement as one of national importance in the hope that other States will be aroused to a sense of the necessity and the feasibility of taking measures to provide trained teachers for all Schools through the instrumentality of a comprehensive system of Normal Schools of different grades.

Teachers' Certificates in California. — To make a system of public instruction entirely successful, it is necessary to provide — first, for educating teachers; and second, for testing their qualifications. Illinois, as shown above, is evidently taking the lead in fulfilling the former condition; but, as to the latter, the State of California is clearly the foremost. In no other State are the legal provisions for the examination of teachers so comprehensive and complete, and in no other State have the laws relating to the qualifications of teachers been administered with so much vigor and success.

Three distinct Boards for the examination of teachers, have been created in the State. First, there is the State Board of Examination, consisting of the Superintendent of Public Instruction, who is *ex officio* chairman, and four professional teachers appointed by the Superintendent. This Board must hold at least two sessions in each year, and it has power to grant Certificates of the following grades, which are valid throughout the State: Educational Diplomas valid for six years; Certificates of the first grade, valid for four years; Certificates of the second grade, valid for two years; and Certificates of the third grade, valid for one year. And "in order to elevate the profession of teaching and advance the interests of Public Schools," this Board may grant teachers Life Diplomas, which shall remain valid during the life of the holder, unless revoked for immoral or unprofessional conduct, or want of qualifications to teach. But this most honorable Diploma can be granted only to such persons as shall have, after receiving the State Diploma, taught successfully one year, or for the same period held the office of State, City, or County Superintendent.

Next in order are the County Boards of Examination, composed of the County Superintendent, who is *ex officio* Chairman, and of teachers, not exceeding three, appointed by him. This Board must hold a session at least as often as once in three months, and also at and during any teachers' institute held in the county. The Superintendent of Public Instruction is *ex officio* a member of

all the County Boards of Examination. This Board has power to grant three grades of certificates valid in the County, the first for three years, the second for two years, and the third for one year.

Finally, there are City Boards of Examination. In every city having a Board of Education governed by special laws, there is a Board for determining the qualifications of teachers, which consists of the City Superintendent, the President of the Board of Education, the County Superintendent of the County in which the city is situated, and three Public School teachers, residents of such city, who are elected by the Board of Education for one year. This Board is empowered to grant Certificates of the same grades and for the same time as the State Board, but valid only in the city in which they are granted. This Board is, however, not authorized to require an examination of a teacher who already holds a State Diploma or Certificate, unless such teacher is an applicant for a school of a higher grade than the Certificate held allows such teacher to teach. Any City Board may recognize the Certificates of any other city.

The State Board is also empowered to prescribe a standard of proficiency before a County Board, compliance with which shall entitle the holder of the certificate to a certificate from the State Board, upon due certification of the facts by the County Superintendent.

Another wise provision in the school-law of California, calculated to elevate the profession of teaching and give it an honorable status by the side of other learned professions, is in these words: "All regularly issued State Normal School Diplomas from any State Normal School in the United States, and all Life Diplomas granted by the State Board of Examination in any of the United States, shall be recognized by the State Board of Examination of this State as *prima facie* evidence of fitness for the profession of teaching; and the said Board shall, on application of the holders thereof, proceed to issue, without examination, State Certificates, the grade to be fixed at the option of the Board; *provided*, in all cases satisfactory evidence be given of good moral character and correct habits."

This just and liberal provision stands out in marked contrast to the unjust and illiberal policy of Massachusetts, which makes the best graduates of her Normal Schools liable to be examined by any Town School Committee before they can become legal teachers in the State.

The State Superintendent of California, in his Report for 1864–65, says, "Unless a high standard (of qualifications of teachers,) is established and carefully enforced, there is no security for the efficiency of

the Public Schools. Incompetent teachers may nullify all legislation, and degrade the character of our Public Schools. In no other way than by thorough State examinations, is it possible to form an earnest and capable *corps* of professional teachers in the State." In his Report for 1866–67, he gives a catalogue of the names, residences, positions and salaries of all the holders of State Diplomas and Certificates of the several grades, in order to give them, as far as possible, the official recognition of the Department. From this list it appears that, up to January 1st, 1867, there had been granted forty-six State Life Diplomas, ninety-four State Educational Diplomas, one hundred and fifty-seven first grade, one hundred and two second grade, and thirty-three third grade Certificates.

The effect of these admirable provisions has been to create among the teachers of California a stronger *esprit du corps*, a higher sense of the dignity and importance of their profession, and more enterprize in fitting themselves for their work, than are found among the teachers of any other State. It is but just to add that the credit of thus placing California in the van of all the other States of the Union in this vital respect belongs almost wholly to Hon. John Swett, the late Superintendent of Public Instruction, whose herculean labors for the cause of Education, entitle him to a place among the foremost of American educators. This able man, the Horace Mann of the great Pacific State, having been rotated out of office by party politics, with an almost unparalleled devotion to his profession has taken the position of Principal of a Grammar School in the City of San Francisco.

Preservation of Infant Life. — The following suggestions on this topic, are offered by Mr. Sanborn, in the fifth Report of the Massachusetts Board of Charities.

1. Much of the mortality among infants of all classes is easily preventable, and is actually prevented, even with delicate children, in families where they are carefully nursed.

2. Among motherless infants the amount of preventable mortality is relatively greater than in any other class; it is now more largely beyond the minimum rate than in any other class of infants.

3. This last named mortality can be reduced by the establishment of Foundling Hospitals, as is shown by the experience of nearly every European country, and of the City of New York. But,

4. It cannot be reduced to a minimum except by introducing a system radically different from that of the Foundling Hospital; namely, by placing these infants in actual families, receiving only one

at a time, and giving each infant the care and nursing that our own children receive.

5. Between these two extremes, the great Foundling Hospital and the Family System reduced to its lowest terms — the numerator being one baby and the denominator one nursing woman — stands the Asylum or Mixed Family System, such as has been adopted at Paris, at Dublin, at Berlin, and in the Massachusetts Infant Asylum. This requires a receptacle for motherless infants, which may also be a Home, but which is never to contain more than twenty or thirty infants at once, and, if possible, never half so many, the others being given out for adoption or placed at nurse in good motherly hands.

6. The tendency in all civilized countries is toward the Family System, through first, the Foundling Hospital, and second, the Asylum or Home System; and the mortality among infants of this class is reduced from 90 or 95 per cent. under the old no-system, to from 40 to 60 per cent. in well-managed Foundling Hospitals; from 30 to 50 per cent. in good Asylums, and from 20 to 35 per cent. in good single families, the last being scarcely above the normal death-rate of all infants.

7. The effect of any good system of preserving these neglected lives is to increase the apparent number of illegitimate births, and greatly to increase the number of such children who survive infancy. But there is no good ground for believing that fornication is thus increased, while it is well known that abortion and infanticide are considerably diminished by a better provision for these infants.

8. That there are many diseased and worthless infant lives which can never be preserved, is true; but these should be allowed to go back to the God who gives and takes away life without having death hastened by our neglect.

9. That the most precious of all increase is that of human lives, and that none better deserves the wise protection of the State.

10. In fine, it is the duty of the State to provide by law for the better care of motherless infants by directing that the Overseers of the Poor and the State Officials shall in all possible cases place such infants in private families to be nursed; and failing that, in small establishments where they may receive individual care; while the small residue who reach the larger public institutions should be tenderly nurtured under special regulations.

Asylums for the Insane. — A year ago, among the visitors at several of our Asylums for the Insane, Inebriate and Idiot, was Dr. Frederic Morton Manning, a Commissioner of the South Australian

Government to inspect Asylums for the Insane in Europe and America, and to report on the general treatment of insanity. His Report has been printed for the Government at Sydney; it is a blue book of some three hundred octavo pages, with many plans annexed, and is written after visits made by Dr. Manning in 1867 and 1868, to twenty-five asylums in England, nine in Scotland, fourteen in the United States, nine in France, six in Belgium, four in Germany, and one in Holland, besides many lunatic wards in British poorhouses. The information thus obtained in regard to the treatment of lunatics, their diet, employment, etc., the architecture of Asylums, their inspection and general regulation, is here set forth concisely and conveniently. He reports that restraints are much more common in the American than the English Asylums, and still more frequent in France than here. He visited Gheel, and bears testimony to the general good management of the Insane there; he also speaks of the Scotch practice of boarding the Insane in private houses, and finds much to commend in it. It does not seem to be gaining ground in Scotland, however, and though a similar practice has been recommended by the Massachusetts Board of Charities for adoption in that State, no action in that direction has been taken. In respect to Gheel, Dr. Manning seems to hold a middle ground between those who praise and those who disparage that remarkable Belgian village, where, for several centuries the Insane have been received as boarders in private families. It is attracting much notice, just now, having lately been described by Dr. S. G. Howe, Dr. Merrick Bemis, and other American physicians; by a French writer, M. Duval, and by the author of a recent English book, called "Flemish Interiors." The latter has called forth long reviews in the Athenæum and other widely circulated journals in England. Those who were present at the meeting of our Association in New York, in November, 1867, will remember the interesting account given of Gheel by Dr. Howe. Dr. Manning's account is much the same in its statements, but he does not take as hopeful a view of the application of the Gheel system in other countries as Dr. Howe does, and believes it quite inapplicable in Australia. Of the good results of the American Asylums for the Inebriate and Schools for the Idiot, Dr. Manning speaks warmly. He visited Dr. Day's Asylum at Binghampton, and praises Dr. Day, as do all who know him.

1. Free Markets. — If there is any one subject upon which all pr minds will agree in this country, it is the exorbitance of the ruling cons ces for the necessaries of life. The present high cost of living titutes, indeed, a grinding burden upon all classes of society and

affects the material and moral condition of the poorer portion of the people to a lamentable and dangerous degree. Hence it is a matter of the greatest importance, that such reforms be brought about in our economic relations as will at least afford relief from that part of this positive evil, which cannot be attributed to the effects of an inflated currency and to excessive taxation. With this view the following project, prepared by some public-spirited members — practical business men — of this Association, is submitted, as bearing upon one of the direct sources of high prices, viz.: the selling monopolies, existing in the public markets of our larger cities, and the exactions of the middle-men, who intervene between the producers and the consumers.

The principal features of the project are:

1. To organize companies under corporation-charters with capital to the amount of one hundred thousand to two hundred and fifty thousand dollars, with a constitutional limitation of dividends to six or seven per cent.

2. To lease or erect suitable buildings in central locations with arrangements for the sale of market-produce in the basement, on the ground floor and the first floor above.

3. To have the principal officers of the market consist of an Executive Board, Treasurer, and Business Managers, with proper assistants.

4. To invite producers to consign all such products as may be approved of by the Executive Board to the markets, to be sold for their benefit for such small commission as will be requisite to cover the expenses of sale and insure the payment of the fixed interest on the capital invested.

5. To have each day's prices regulated by a Committee, composed of producers and the officers of the companies; but to allow at the same time the consignors, if they so elect, to mark their goods at less than the established price.

6. To allow all consignors to advertise their names and residence as the producers by cards placed with their productions. This with a view to associating the names of producers in the minds of consumers with the relative quality of the product.

7. To permit consignors to assist, under proper restrictions, in the sale of their products.

8. To pay the salesmen and saleswomen, assistant-cashiers, and other employés by salary or by commission on sales or both, and to control them by the safest check-to-dishonesty system known in mercantile practice.

9. To make the markets attractive by enforcing the most scrupulous neatness and cleanliness, and keeping out all improper characters.

10. To hire or own one or more railway cars and run the same daily or oftener, by regular specified trains, along the most suitable routes, and to let the public know that such car or cars will receive any products of marketable quality, properly marked and invoiced, for transportation to the market. This in order to save the producers the great expense of sending special wagons to market, and enable them to give their whole time to production. Such an arrangement, it is thought, would also enable producers, residing at greater distance, to compete with those nearer to cities.

11. To discharge the products, thus collected, either directly at the markets, by running the cars of the companies to them, or by means of wagons owned by the companies.

12. To let all sales be for cash on delivery, and to collect an extra fee for the delivery of articles at the residences of purchasers.

13. To establish branches of the principal markets in small, neat store-rooms in the different sections of cities, in charge of women, with young men as assistants, and for the sale of a portion — say milk, fruits, vegetables and the like — at least of the articles found at the main depot. The employés of such branch markets could receive orders for any articles sold in the central market and transmit them to the latter by the use of special telegraph wires, when they should be filled with the least possible delay.

14. To make arrangements with street railway companies to receive orders for the central market in special boxes affixed to each car, run in and out of cities, which orders could be collected quite readily as each car passed its central station and carried to their destination.

15. To devote part of the space of the market-building to the sale of garden-flowers in the same way as market-produce. In this manner the inmates — especially children — of public institutions might be profitably and agreeably employed both in raising flowers and in preparing them for the market.

16. To employ part of the capital of the companies in both purchasing products in large quantities in distant places and contracting for the productions of staple articles.

Steps will be taken by the Association to test the practicability of the above scheme.

European Emigration. — The subject of encouraging the emigration to this country of persons of the middle-classes, who have become impoverished in consequence of any cause and who have no chance of bettering their circumstances at home, has, of late, had the serious consideration of philanthropic Societies and individuals in

London and elsewhere. The British and Colonial Emigration Society is about taking some action in aid of emigration to the United States, and the British Government, through Mr. Goschen, the President of the Poor Law Board, has announced its intention to grant assistance to British subjects intending to emigrate. Moreover, a spontaneous movement, looking to the emigration of skilled laborers on a large scale, has been set on foot within the last few months among the working population of districts, which have hitherto contributed but a small percentage to the yearly efflux from Great Britain to the United States.

In view of these facts, and of the impositions and hardships of every description experienced by emigrants on landing in this country from want of proper information, it has been suggested that this Association could do a very humane work by undertaking the compilation of a *vade-mecum* for the use of emigrants. After due consideration, the conclusion was reached that such an undertaking, from its tendency to increase the economic forces of the country, would fairly come within the legitimate sphere of the labors of the Association, and the work has been taken in hand by the Executive Officers.

Their plan is to compile, for publication, with the aid of competent members of the Association and others, a guide-book containing, in concise form, all desirable information in regard to the cost and the best time and mode of crossing the Atlantic; the relative advantages of landing in different ports; the organic and statute laws of the Union and the several States; the philanthropic provisions on this side for the benefit of emigrants; the dangers incurred on landing; the cost of living; the chances of finding employment and the rates of wages in the Eastern States; the expense of reaching the interior; the material and other inducements held out to the various classes of emigrants in the different sections of the country, — in short, whatever may serve best to instruct and guide those that come to the States to better their fortunes.

None but perfectly disinterested and absolutely reliable information is to be included in the proposed guide-book. It is intended, moreover, to submit the compilation to authorities as well as to individuals, commanding the public confidence, both in this country and Great Britain and to obtain their formal endorsements for it.

If the plan of the Association can be successfully carried out with regard to emigration from Great Britain, it will be extended to emigration from other European countries, particularly Germany.

Financial Aspects of the United States. — The external financial relations and the internal economical condition of this

country present at this juncture as curious and interesting problems, perhaps, as were ever presented by any country at any time. Externally the United States seem to occupy the position of a very wealthy young spend-thrift, who is having constant recourse to the Jews. Importing annually far in excess of our exports — fifty seven millions of dollars in gold, for instance, in the last few months, — the balance is paid in paper securities bearing a large interest and sold at an enormous discount. Two contingencies may at any time put a stop to this process, — either the refusal of Europe to "shave" any more American paper, which would be equivalent to a demand for future balances in gold, or a serious foreign complication whether involving this country or not. Either contingency must lead to a drain of gold to Europe, and a return by the ship-load of evidences of indebtedness to this country. From a purely theoretical point of view, therefore, it is difficult to see on what principles a gradual and steady return to specie payments can be anticipated. The exhaustion of those securities which Europe is willing to buy, or the death of any one or two or three leading public men, might send gold up again to war prices and prove, in a way other than gradual contraction, the beginning of the end.

Internally the problem is still more intricate. The country, thanks to its youth and native vigor, is producing immensely under conditions which would put a stop to productions anywhere else. Yet there is no business done so legitimate as not to have its basis in gambling on the price of gold. The enormous creation of new wealth insures us against anything like permanent ruin, though it cannot avert a crash. On the other hand the gambling mania, incident to such a basis of trade made necessary, has largely perverted the capital of the country from legitimate business, and "it is scarcely possible to avoid the inference that nearly one-half of the available resources of the National Banks in the City of New York are used in the operations of the stock and gold exchange." Under this stimulus the great transportation lines of the country are rapidly passing into the hands of a few cliques, who manipulate the securities confided to their trust for their private emolument. Wall Street is indeed at this time the most notable gambling establishment the world has yet seen. The professionals engaged there decoy into it the outside public, as it is called, for purposes of plunder, and, from time to time, fall out among themselves and rend and destroy each other by "pools," "corners," "lockings-up," and other like devices. This condition of affairs cannot endure, — it must either wear itself out or it will wear out the country.

Such are a few of the elements which enter into a problem which seems ever to turn on the falacies of paper money. More interesting questions could not present themselves, if an observer were only at hand patient enough and comprehensive enough to grasp and combine them all, and to give the result to the American people reduced to a few simple principles.

Prison Discipline. — The administration of penal justice is one of the most important departments of the public service, affecting, as it does, the rights of property, the safety of society, the security of human life, the maintenance of social order, and the purity of the public manners. It is, therefore, a just subject of gratulation that there has, of late, both at home and abroad, been awakened a fresh interest in the question of prison discipline and prison reform. The press, from the stately quarterly to the many-sided daily, gives token of this revival of interest. So does the recent formation of prison discipline societies in different parts of the country. The same is true of the appointment of special commissions by several of the States, as Pennsylvania, New Jersey, Kentucky and California, to devise improved prison systems to be proposed for the action of their respective Legislatures.

There are five classes of penal and correctional institutions in the United States, — the Station-house, County Jail, House of Correction, State Prison, and Juvenile Reformatory.

The Station-houses are the most numerous and the worst managed of all our prisons. A writer in the North American Review has well said that the Howard of this class of prisons has not yet arisen. There is certainly much need of his appearance. The detention here ranges from an hour to a week, the average being probably less than a day. But is long enough to do infinite mischief.

The County Jails in the United States are probably more than one thousand in number. A few of them are well constructed and well managed; but it is otherwise with the great majority. Insecurity, scant accommodations, bad ventilation, vermin, defective separation of the sexes, forced idleness, the absence of all means of mental improvement, little religious instruction, and, above all, the promiscuous and corrupting association of the prisoners, are among the most prominent defects and imperfections of our common jails.

The House of Correction — called in some of the States Workhouse, Penitentiary, or Bridewell — holds an intermediate place between the County Jail and the State Prison. This class of prisons is found in but few States, as Massachusetts, New York, and Michigan.

They are designed for the reception and treatment of misdemeanants, There are several among them that may be pronounced admirable institutions. Three stand preëminent, having a national reputation — the Albany Penitentiary and the Houses of Correction at Boston and Detroit.

Our Juvenile Reformatories — called in some States House of Refuge, in others Reform School — are institutions, in commendation of which it would be difficult to go too far. They are found in all the Northern, Middle and Western, but few in the Southern States. The aggregate number of criminal children received into them is between fifty thousand and sixty thousand. Of this number, from seventy-five to eighty per cent. have been discharged reformed, making a total of at least forty thousand now pursuing a virtuous career, the greater part of whom, but for these noble institutions, would have gone to swell the ranks of crime.

The highest class of prisons, and those on which the public eye is most turned, are the State Prisons, to which convicted felons are committed. We have examined the Reports for 1867 of all such of these institutions as have issued Reports. Two things have afforded special gratification in this examination — the improved character of the Reports, and the evidence they afford of an advance of sound principles.

The financial administration of the State Prisons offers an interesting study. The average number of inmates in thirty-four of these prisons was thirteen thousand four hundred and ninety-six. The aggregate expenditure in twenty-six of them was one million nine hundred and thirty-one thousand four hundred and fifty dollars, giving a cost *per capita* of one hundred and seventy-seven dollars. Their total earnings were one million ninety-two thousand six hundred and eighty dollars, giving an average gain of one hundred and twenty-three dollars. If all the prisons had been as economically managed as those of Connecticut and Ohio, in which the cost per man was less than one hundred and twenty dollars, they would not only be self-supporting, but would have earned a net profit of more than one hundred thousand dollars. Six of the prisons embraced in the statement earned a surplus over expenditures amounting, in the aggregate, to seventy-five thousand seven hundred and seventy-three dollars; and in about an equal number, the income from earnings was nearly equal to the cost of support.

There is one fact revealed in the Reports, which has a melancholy interest; it is that nearly one-fourth of the inmates of the State Prisons of the country are minors. In one prison the propor-

tion is nearly fifty per cent., and in several it is either over or but little under thirty per cent. This fact has turned the thoughts of benevolent and thinking men to the policy of separate prisons for this class of offenders; prisons which might be properly made to assume the character more of a well-conducted farm or work-house school than of an ordinary prison. The Legislature of New York has already made a movement in this direction. A bill to authorize the Government to appoint Commissioners to select a site and propose an organization for a State Industrial Reformatory for the treatment of young criminals, from sixteen to twenty-one, has passed the Senate, and is likely to pass the Assembly. There is every probability that this bill will become a law, and if it should, there is an equal probability that it will be a new and most important point of departure in the progress of prison reform.

It is quite evident, from the Reports examined by us, that there is a growing favor towards the Irish or Crofton system of prison discipline, as the knowledge of that system is extended. There appears to be a steady progress towards its adoption — not probably in all its details, but at least in its general principles. Our best thinkers and workers in this cause are coming to be more and more in accord with that noble British Philanthropist, Miss Mary Carpenter, who says: "The Crofton principle is the only true one, and must eventually be accepted by all who desire to inaugurate a really reformatory system."

Census of 1870. — Perhaps the most important function, to be exercised by the Government of the United States in the immediate future, is the taking of the Decennial Census in the coming year. This may strike those, who have given little reflection to the subject, as a rather bold assertion. But, when it is borne in mind, that the impending Census is to furnish the basis not only for the whole fiscal, but also for much of the political legislation of Congress during the next decade, the statement will perhaps not be considered extravagant. Impressed with the importance of awaking in our legislators as well as the public at large a sense of the great consequence of the vast statistical enterprise about being undertaken under national auspices, we deem it well to reprint the remarks, with which Hon. Jas. A. Garfield of Ohio, as Chairman of the Special Committee on the Census accompanied the introduction on April 6th, of a bill "To provide for the taking of the ninth and subsequent Census." The philosophic view he takes of the subject and his emphatic recognition of the indispensability to law-makers of a thorough knowledge of Social Science prove that Congress, in placing him at the head of the Census

Committee, has for once put the right man in the right place. We may add that the Association, through the Executive Officers, have offered to coöperate with the Census Committee in improving the plan under which former Censuses were taken, and that their services have been cheerfully accepted.

Mr. Garfield said: "Mr. Speaker, I am quite sure that I cannot overrate the importance of any bill which this House may pass to provide for taking the next Census, nor can I hope in the thirty minutes granted me to discuss it worthily. I can do no more than indicate some of the leading points connected with the work, and touch upon the principles on which it rests. But for the pressure of business which now crowds the closing days of the session I should insist on a full discussion of the whole subject, but I yield to necessity and ask the House not to judge the measure by my support of it. It is a noteworthy fact that the Constitution of the United States is the only one among modern Governments that provides for the taking of a Census of the population at regular intervals. Other nations have established some method of taking statistical account of their people, but in ours alone, I believe, is a Census made the very basis of the Government itself. The fact is also significant as indicating the tendency of modern civilization to find the basis and source of power in the people, rather than in dynasties or in any special theories of government. It is a declaration that the population of the country are the great source of wealth as well as of power. Our wealth is found not so much in the veins of rich minerals that fill the earth as the purple veins of our free citizens. Placing this high value on human nature, our fathers wisely required that at every period of ten years we should make out anew the muster-roll and ascertain the condition and strength of the great army of civilization which they started on its grand march across the centuries. This age is preëminently distinguished by the fact that it recognizes more fully than any other the reign of law; that not physical nature alone, but man and great communities of men, are modified and controlled by laws which are as old as creation. It is a part of that great reform which Bacon applied to science and which modern nations are applying to politics. Before Bacon's time, if a man desired to write about the solar system he sat down in his closet and evolved from his own mind his theory of the universe. He framed a plan for nature, and then tried to bend her facts to suit his theory. But the new system of philosophy changed all this. It taught the man of science that he must become like a little child and sit at the feet of nature and learn of her, and that only by a patient and humble study of facts and phenomena could he dis-

cover the laws by which the universe is governed. In such studies man must be a discoverer, not an inventor. By slow degrees have mankind come to know that law pervades the universe of mind as well as of matter; and latest of all have they come to the knowledge that men and nations must be studied, and all the social and political forces of a nation must be examined with the same care that the man of science studies nature before we can frame wise and salutary laws for the government of its people. All attempts of philosophers to form ideal theories of government have been utter failures. Neither Plato's ideal republic, More's Utopia, nor John Locke's plan of government would ever have been tolerated a day in any nation of the earth. These writers were building kingdoms in the realms of the imagination, not on the earth. Men of ancient times resembled rather the German philosopher of whom it is said that if he was called upon to describe a camel he would evoke a description of that animal from his consciousness. The modern method would be to photograph the camel or dissect him, and learn from actual observation rather than from the suggestion of the 'inner consciousness.' The spirit of our times is far different.

"When we propose to legislate for great masses of people we must first study the great facts relating to the people; their number, strength, length of life, intelligence, morality, occupation, industry, and wealth, for out of these spring the glory or the shame, the prosperity or the ruin of a nation. That provision of our Constitution requires us to record and consider these great facts and to make them the basis of our legislation. I believe the time is coming, and indeed is almost here, when the man who comes into this Hall as a legislator for the people must come not merely with theories, but furnished with material facts which exhibit the condition, wants, wealth, industry, and tendencies of the people for whom he proposes to legislate, or he will be powerless to serve their higher wants. The black-letter learning of the law will not suffice. He must study the laws which the Creator has written in the hearts of men, and in the continents which they inhabit, if he would know how to legislate for a great nation.

"This is the age of statistics, Mr. Speaker. The word 'statistics' itself did not exist until 1749, whence we date the beginning of a new science on which modern legislation must be based in order to be permanent. The treatise of Achenwall, the German professor who originated the word, laid the foundations of many of the greatest reforms in modern legislation. Statistics are State facts, facts for the consideration of statesmen, such as they may not neglect with safety. It has been truly said that 'statistics are history in repose; history is

statistics in motion.' If we neglect the one we shall deserve to be neglected by the other. The legislator without statistics is like the mariner at sea without a compass. Nothing can safely be committed to his guidance. A question of fearful importance, the well-being of this Republic, has agitated this House for many weeks. It is this: are our rich men growing richer and our poor growing poorer? And how can this most vital question be settled except by the most careful and honest examination of the facts? Who can doubt that the next Census will reveal to us more important truths concerning the situation of our people than any Census ever taken by any nation? By what standard could we measure the value of a complete, perfect record of the condition of the people of this country and such facts as should exhibit their burdens and their strength? Who doubts that it would be a document of inestimable value to the legislator and to the nation? How to achieve it, how to accomplish it, is the great question.

"We are near the end of a decade which has been full of earthquakes, and amid the tumult we have lost our reckoning; we do not yet comprehend the stupendous changes through which we have passed, nor can we until the whole field is resurveyed. If a thousand volcanoes had been bursting beneath the ocean, the mariner would need new charts before he could safely sail the seas again. We are soon to set out on our next decade with a thousand new elements thrown in upon us by the war. The way is trackless, who shall pilot us? The war repealed a part of our venerable Census Law. One schedule was devoted to slaves. Thank God! it is useless now. Old things have passed away and a multitude of new things are here to be recorded, and not only the things to be taken but the manner of taking them requires a thorough remodelling at our hands. If this Congress does not worthily meet the demands of this great occasion, every member must bear no small share of the odium that justly attaches to men who fail to discharge duties of momentous importance, which once neglected can never be performed."

How to Observe the United States. — The Association have appointed a Committee to consider the preparation of a guide to the observation of the United States. It is believed that such a work is especially appropriate, thorough and pertinent observation being essential to Social as to any other Science. Such a guide is much needed, not only by foreigners, but by ourselves. It is the work of time, labor, and patient thought. But it is one, which this Association, with its various departments, its Committees in the larger

cities, and the intelligent and earnest men which it seems to be so happily drawing into its service, is fully competent to undertake.

We will refer to a few of the objects embraced within this scheme. 1. Physical Geography of the country:—Lists of surveys, national and State reports, and collections of objects upon which such reports are based. 2. History:—Lists of historical and archæological societies and collections; sources of information as to the first settlers in the country and their subsequent movements; later immigration, and its distribution. 3. Education, direct and indirect:—Lists of the authorities upon public schools; of representative schools; of universities, colleges, and special schools; public libraries; lecture system and the press. 4. Public Health:—including all sanitary boards and movements, parks, baths, industrial dwellings and the inspection of food; all reports, public and private, upon hygienic questions. 5. Economy, Trade, and Finance:—Lists of writers of the different schools, boards of trade, statistical societies, national and State reports on commerce, manufactures, and agriculture. 6. Government:—Organization of National and State Governments, and their respective bureaus, including legislation and judicial procedures; prisons and reformatories; charitable institutions.

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2. Foreign.

Art-School for Women. — In Germany, as in almost every other civilized country, the necessity of opening new fields of useful and remunerative labor to women is more and more felt. Various movements have of late been inaugurated in that country with a view to meeting this want of the age. In Berlin, a permanent exhibition of products of women's labor has been established in order to secure better prices and increase the demand for them. The "Bazaar," as the exhibition is called, commands liberal patronage, and has produced the desired effect to a considerable extent. In the same city an institution, intended to furnish women with an opportunity for obtaining a secondary education, has recently been opened under the

auspices of some of the first educators of the kingdom. A similar institution is about to be organized in Stuttgart. In Munich, about a year ago, a number of public spirited persons of both sexes, belonging to the upper circles of society, united to bring about the opening of an "Art-School for Women." Their efforts were successful, and the school is now in full operation. In their appeal for aid in starting the institution the founders say:

"The necessity in the present condition of society of providing young women of the middle classes with new means of earning a respectable and sufficient livelihood is perceived by all intelligent minds. Social statistics go to show the constant increase of women in necessitous circumstances, and unless this class are enabled, by more comprehensive and thorough instruction in various branches of human knowledge and practical activity, to support themselves, this evil will increase to the detriment of both state and society. It is our sincere conviction, that Art and of its various branches especially Painting holds out to talented young women the promise of a new and lucrative pursuit."

The friends of the undertaking organized themselves into a regular Association with a Constitution and By-laws. Article I. of the former says: The object of this Association shall be to provide young women with new means of self-support, by enabling them, through thorough instruction in Art, to become (a.) artists (if possessing the proper talent;) (b.) teachers of drawing of a higher order; (c.) designers for industrial establishments; (d.) assistants in photographic ateliers. Another article provides that applicants for admission must be at least fifteen years old, and that they shall be admitted only after the Executive Committee have satisfied themselves by due examination of their fitness.

The following extracts from the regulations will explain the mode of instruction adopted for the school:

Art. 1. The school consists of —

1. A class in drawing, with two subdivisions: (a.) ornamental drawing and drawing from animal life; (b.) drawing of heads and figures from plaster casts, and of landscape studies.

2. A class in advanced drawing and painting divided into sections (a.) for oil painting; (b.) for painting in water-colors, especially in its application to industrial purposes.

3. Of regular lectures on the History of Art in general, and of ornamentation in special, and on Perspective.

Instruction is given by artists of distinction for the low charge of twenty-five florins or ten dollars per annum.

French Views of Higher Education. 1. *The Scholar's.*— (From "Questions Contemporaines" by Ernest Renan, 1868.)

"Higher instruction is the source of primary instruction. To sacrifice the first to the second is to commit a mistake, to defeat the object in view. The refusal of a million to high culture may stop short the intellectual movement of a country; the grant of a million to primary instruction will be of little effect. Very different sacrifices are required for the improvement of popular instruction. Primary instruction is complete in a country only when the enlightened class of the nation claims it, understands it, and sees its expediency and justice. Labor to create superior classes which are animated by a liberal spirit; otherwise you build upon the sand; the whim of an ill-disposed or unenlightened Legislature will destroy your foundations. To create a forest, it is not enough to plant it; you must secure the plants against being uprooted. As long as we have not destroyed in France this false idea that education is valuable only in respect to social position, or to the cultivation and instruction of the poor man, this is to produce in him wants and aspirations which cannot be satisfied, nothing will be definitely gained. The strength of popular instruction in Germany springs from the strength of superior education in that country. The University makes the School. It has been said that the primary teacher was the conqueror at Sadowa. Not so; the conqueror at Sadowa was German Science, German Virtue, Protestantism, Philosophy, Luther, Kant, Fichte, Hegel. The instruction of the people is an effect of the high culture of certain classes. Those countries which, like the United States, have established a general system of popular education, without any real higher instruction, will expiate this mistake for a long time to come, by their intellectual mediocrity."

2. *The Minister's.* — (From a Report on "L'Enseignement Supérieur," by M. Duruy, Minister of Public Instruction, Nov. 15, 1868.)

"Enquiry begun four years ago. — The Report upon Higher Education forms the last of the enquiry commenced four years ago upon the entire system of French Education, and completed by an analytical enquiry into the educational systems of foreign countries, for the purpose of seeking and adopting useful suggestions.

"Two-fold System. — There are, among savants and literary men, two classes, namely: those who make discoveries in science and produce works of merit in literature; and those who employ themselves in popularizing discoveries and great literary productions. To the former, the Government ought to assure, as far as its sphere extends, the best means of research; to the latter, the best opportu-

nities for instruction. The State, in France, has for a long time supplied this want of modern civilization, that is, the development of knowledge, by a two-fold agency; that of institutions with a regular course of instruction in positive science, and that of large establishments more popular in character, where science is reduced to practice.

"Necessity of Higher Education. — Among a people governed by democratic institutions, it is necessary to preserve the taste for severe studies. It is necessary to encourage and to recruit the circle of superior men whose reputation reflects glory upon the whole country and extends throughout its history. Further, the higher studies act upon the lower, and by their influence elevate and expand them.

"School of Higher Instruction.— The Imperial decrees of July 31, 1868, have been received in the scientific world with marked approval. By the opening of Laboratories of Instruction for candidates for a degree their studies will be improved. By the establishment of Laboratories of Research, men of science will have more numerous facilities for their work. By the establishment of the School of Higher Instruction, they will have diligent pupils, intelligent assistants, and future competitors. In the space of two months, and including the vacation, there have been two hundred and sixty-four applications for this school, a number which exceeds all anticipations and which I myself should consider too great, if it should not be sensibly diminished by the examination just ending, which will test the true ability of the candidates. Among them are professors, doctors, and many graduates. Some leave positions which they have gained, or return from abroad to seek admission into the new school. I find even a scholar whose name has been proposed by one of the Sections of the Institute as a candidate for the Academy of Sciences, and who designs to ask from our Laboratories of Research the means of executing works which he could not otherwise accomplish.

"In order to meet these demands, seventeen Laboratories are completed or begun. At the Sorbonne, for Vegetable Anatomy, Physics, Physiology, Mineralogy, Geology, and Chemistry. At the College of France, for Inorganic Chemistry, Organic Chemistry, and Animal Physiology. At the Museum, for Vegetable Physiology, Agricultural Chemistry, Botany, and Zoölogy. At the Normal Schools, for Physiological Chemistry. At the Medical College, for Botany and an Experimental Garden. This same school offers to its more advanced pupils Laboratories of Research for Chemistry, Pathological Anatomy, Physiology and Histology.

"The administration, desirous of enlarging the scope of Medical Science, in the domain of practical studies, opens new Laboratories in

connection with that department. This year, thirteen will be opened to the medical student.

"In the Provinces, scholars demand an addition to the terms of the decree of July 31st, so that their Laboratories shall be considered as annexed to the School of Higher Instruction. Many cities desire to enlarge their higher schools, and the General Council of Calvados, by a happy and honorable initiative, has just voted an appropriation for the Laboratory of Research in Agricultural Chemistry, instituted at the Scientific School of Caen."

Industrial Dwellings. — The difficult problem of providing decent abodes for the poorer classes in large cities may be said to have been solved by Sir Sidney Waterlow, the public-spirited Alderman of London. He deserves the highest credit for having practically demonstrated that capital may be made to furnish working people with good homes, combining the advantages of roominess and plenty of light and air with many modern conveniences, and at the same time to yield a fair profit on the amount invested. By his various building enterprises, during the last few years, he has shown beyond gainsay, that large tenement-houses can be built in the best style, made comfortable and healthy, and yet prove remunerative.

The plan for the construction of "Improved Industrial Dwellings," under which name the tenement-houses in question have become widely known, was devised by this eminently intelligent practical and humane man. To carry it out he organized the "Improved Industrial Dwellings Company," whose paid-in capital last year amounted to £93,250 ($466,250 gold.) This capital has been employed in constructing blocks of buildings in Finsbury Square, Blackwall, and two other convenient localities, containing altogether seven hundred and seventy-eight tenements, lodging three thousand eight hundred and ninety persons. The external peculiarities of the buildings are outside stairways, adopted to save taxation and interior space; flat roofs for drying clothes, and the use of a new building material, which, it is claimed, saves twenty-five per cent. in the cost of construction over the ordinary stone and brick. In the interior arrangements the health and comfort of the tenants are assured by free ventilation, abundance of light, judicious distribution of space, plenty of water, and good cooking facilities. The annual expenses average only £6 to the tenement. The rent charged is very low, compared with the usual rates in London, and yet a profit of 8–9 per cent. is realized by the Company. So great has been the success of the "Improved Industrial Dwellings," that the Corporation of London is putting up buildings in

imitation of them. Other private companies have also been formed, and have already constructed tenement houses on a similar plan. Over five thousand persons last year enjoyed the advantages of the Waterlow system.

The noticeable distinction between the "Industrial Dwellings" and the model lodging-houses of Mr. Peabody, Miss Coutts and other philanthropists, is that they are not, like the latter, monuments of private benevolence, but business-ventures undertaken for and yielding subtantial profits. The former are necessarily limited in number and therefore in capacity, while the latter can be gradually extended until every laboring man has a decent home.

THE FAMILISTÈRE. — The industrial establishment, known by this name throughout Europe, is situated at Guise, a small town in the Department of Aisne, some ninety miles north-east of Paris. It consists of a large foundry for the manufacture of cast-iron heating apparatus and domestic utensils, employing nearly a thousand hands, with lodging-houses, stores, park, gardens, etc., etc., for the employés and their families. Its organization is so unique as to well deserve special notice.

The original proprietor of the entire establishment, M. Godin-Lemaire, commenced more than twenty years ago to carry out a carefully matured plan for the moral and material elevation of his working people. His first step was the construction, at his own expense, of a vast model lodging-house, costing nearly one million of francs. Wishing to symbolize, through both its exterior aspect, and interior arrangement, the idea that by honest labor all the comforts of life can be procured, he provided an edifice distinguished not only for magnitude and symmetry, but for the liberal adaptation of the interior to the wants of civilized beings. While the exterior resembled a stately palace, the interior was so arranged as to contain commodious, airy, well-lighted tenements for two hundred and fifty families, and lodgings for several hundred single workmen, together with kitchens, baths and laundries, nurseries and an asylum for orphans. The purpose of the founder being to furnish his employés, not only with pleasant abodes, but with the means of instruction and recreation, the building contained in addition a library, reading-school and lecture-rooms; a hall for social games, and another for concerts and balls. All lodgers share equally in all the conveniences and privileges. Upon becoming an inmate each head of a family or single workman is required to agree to certain regulations. One of these imposes the obligation upon every head of a family to

send his children to the gratuitous primary school kept up in the building. No minor can become an apprentice in the foundry without having received a thorough elementary education. Evening schools are maintained in which adults receive gratuitous instruction in various mechanical professions, history, geography, literature, drawing, etc., etc. Once a week public lectures on popular subjects are given by competent persons. A band of thirty performers has been organized from among the workmen, which furnishes music for concerts, balls and festivals. Several glee clubs and a theatrical company have also been formed by the inmates. Festivals are held in the warm season, at stated times, in the fine park and gardens surrounding the building, and in inclement weather in inner courts, protected by glass roofs.

After completing the building and appurtenances, the proprietor divided the capital invested in it into small shares, which he offered on easy terms to the heads of families to enable them to become proprietors of their palatial home. The shares were eagerly taken up, and the whole of the property is now owned in fee by the heads of families, who tax themselves to a small extent to provide the means for keeping it in good repair. To non-owners a low rent is charged. Each share entitles the holder, in addition to his tenement, to a garden lot.

Not content with this, M. Godin-Lemaire adopted the coöperative system for his business by giving each of his employés an interest in it. This he did by dividing the appraised value of his foundry into shares, ranging from twenty-five francs upwards, one-half of which he offered to his hands, who readily purchased them. Moreover, in order to enable his working people to make the most out of their earnings, he helped them to establish a Savings Bank, and Mutual Aid Society, coöperative butcheries, bakeries, grocery and other stores, and shoe, boot and clothing manufactories.

In all his humane efforts, M. Godin-Lemaire was guided by the principles — 1. Never to offer any advantage gratuitously; and 2. Never to exercise any compulsion to bring about the adoption of his plans. The result of his disinterested zeal is, that he is to-day surrounded by some thousands of happy human beings, forming, as it were, one vast family, (hence the name "familistère,") who look upon him not as their master, but as their benefactor and friend. How worthy of his enlightened benevolence they have proved will appear from the fact, that for twelve years not a single criminal has issued from among them.

Persons from all parts of the world constantly visit the "Familistère." It may relieve the name of Fourier from some portion of the

terror attached to it, if we state, that M. Godin-Lemaire is one of his disciples and has executed this great work of practical benevolence in accordance with the principles of his teacher.

People's Kitchens. — Of the humane efforts, in various directions, now making in all civilized countries in furtherance of the material well-being of the laboring classes, one of the most laudable is the establishment in the Capital of Prussia of the so-called "People's Kitchens." Their origin is due to the benevolent spirit of an intelligent lady, Mrs. Lina Morgenstern, a resident of Berlin. The success in Germany of the principles of coöperation in their application to the various relations of working people led her to seek a solution, by coöperative means, of the all-important question how to supply those that live by their daily wages with cheap food. To this end, she conceived a plan to start a number of cooking establishments, from which people of the lower classes could obtain wholesome food prepared in the best manner, *at cost.* She succeeded in interesting a number of kindred spirits — among them several leading members of the Prussian Parliament, Professors of the University and Editors — in her ideas, and in June, 1866, a preliminary meeting was held for the purpose of organizing a Society, under whose auspices her scheme was to be carried out. The organization was effected with a view to realizing these fundamental objects: 1. To found "People's Kitchens" on the basis of a capital raised from voluntary subscriptions. 2. To furnish well-prepared food of the best quality to all that may desire it at the cost-price. 3. To make the Kitchens self-supporting by adding to the prime cost of articles the expense of preparing them for consumption.

The necessary funds being raised to the amount of four thousand three hundred thalers, (thaler = 70 cts., gold) several Kitchens were opened in the course of 1866. Many difficulties were encountered during the following year by the founders in their endeavors to develop the system on a more comprehensive scale. But they were successfully overcome, and at the close of last year no less than ten Kitchens were in full activity. Their mode of operation is this: A general supervision is exercised by an Executive Committee appointed by the Society, members of which — mostly ladies — attend daily at the Kitchens during business hours. The actual work in the Kitchens is performed by salaried employés, including book-keepers, cashiers, waiters and cooks. The articles of food to be prepared from day to day are fixed at regular intervals by the Executive Committee. The food provided consists of soups, meats, bread, potatoes, beans, peas,

lintels, green vegetables in their season, and fresh and dried fruit, with the usual condiments. It is sold in portions or half portions of a certain quantity at a fixed price, regulated by the Executive Committee. The price has never exceeded two groschen (four cents.) The portions can be either taken away or eaten on the spot in large refectories provided for the purpose with tables, chairs and table-utensils.

The benefit, conferred upon the lower classes of Berlin by the People's Kitchens, may be estimated from the fact, that the average number of purchasers at each of them last year was over a thousand a day. One refectory has accommodations for two thousand persons, and yet few vacant seats are ever found there during meal hours. From November 1, 1867, till October 31, 1868, several millions of portions were sold, with an aggregate expenditure to the Society of 60,185 thalers.

The "People's Kitchens" must not be confounded with the charitable institutions known as "Soup Houses." The object of the former is not to give alms, but to give tens of thousands of customers the benefit of the saving effected in purchasing and cooking food in large quantities.

Co-operation in Railroad Management. — In extent and rapidity of development, the American railway system does not yield the palm to that of any other country; but with regard to management most of our roads are notoriously inferior to those of the Old World. Not the least obstacle to a more successful administration, encountered by our Railroad Corporations, is the difficulty of obtaining honest and efficient employés. They may perhaps learn how to overcome it from the following account of the method employed by one the principal French Railway Companies to secure faithful and competent servants.

The Company in question operate the Orleans Railway, consisting of a trunk line from Paris to Bordeaux via Orleans, Tours, Poitiers and Angoulême, and various branch lines of an aggregate extent of about six hundred English miles. Besides twenty-five hundred mechanics and laborers paid by the piece or day, there are no less than fifteen thousand regular employés, who receive, in addition to regular salaries, a share in the net profits of the Company, according to their stated wages and the importance of their services. The employés as such are not Stockholders, but simply participants in the profits. Their share has frequently exceeded thirty-three per cent. of the salaries; but the yearly average since 1844, when the system was

first adopted, has been twenty-two per cent. No less than twenty-five millions of francs ($5,000,000 gold) have been thus distributed during the last twenty-two years among the employés over and above their salaries which are as high as on any road in France. The share of each employé in the profits is divided into three equal parts. One is paid directly to him; another is paid into a pension-fund, out of which annuities are allowed to employés, incapacitated from service by accident, sickness, or old age; and the third is deposited to the employé's credit in a Savings Bank, from which it can only be drawn with the permission of the Board of Directors, as long as he remains in the service of the Company.

Nor is this all that the Company do for the benefit of their employés. Vast kitchens have been opened at the principal stations along the road, where meals can be obtained at cost by the employés and their families, to be eaten either at dépôts or at home. Large stores have also been established at suitable points, where the employés and their families can purchase provisions, groceries, and clothing at wholesale rates. By this arrangement a saving of twenty to thirty-five per cent. is effected for their benefit. Again, the Company add five per cent. to the salaries whenever the prices of the necessaries of life range above a certain rate. Gratuitous medical attendance to the employés and their families is also provided at an expense to the Company of three hundred and fifty thousand francs per annum. The Company further contribute ten thousand francs per annum to the fund of a "Mutual Aid Society," established by the employés. And lastly the Company distribute two hundred and fifty thousand francs annually in relief of special cases among employés and to their widows and children.

The result of all this liberality has fully justified the anticipations of the Stockholders. The vast sums allotted out of their profits to the employés, instead of making their stock less lucrative than that of other roads, have made the receipts of the Company greater than that of any other road in France. The reason is evident. The employés having a direct interest in the earnings of the road naturally exert themselves to increase them by doing more work, guarding more carefully against accidents, taking better care of the Company's property, etc., etc. No road has a more experienced and devoted body of servants. They are so much attached to it that nine-tenths grow gray in its service. Strikes are entirely unknown, and resignations and dismissals exceedingly rare.

We would add that two other great roads in France, viz.: the Southern Railway, operating seven hundred miles, and the Eastern

Railway, three hundred miles, have adopted in part the system of the Orleans Company.

Government Annuities and Insurances in Great Britain and France. — In 1861 Savings Banks were established in Great Britain in connection with the Post-Office Department. At these Banks, intended specially for the working classes, deposits of one shilling and upwards are received; but no one can deposit more than thirty pounds in one year, or more than one hundred and fifty pounds in the aggregate. These deposits are guaranteed by the Government, which allows interest at the rate of two and one-half per cent. In 1863, mainly through the efforts of Mr. Gladstone, Parliament passed a law authorizing the Postmaster-General to grant immediate and deferred annuities of not more than fifty pounds to persons of either sex of the age of ten years and upwards, and also to insure the lives of persons of either sex between the ages of sixteen and sixty for not less than twenty pounds, or more than one hundred pounds. This law has been duly carried into effect and the industrial classes are gradually availing themselves of its provisions.

In imitation of the British precedent, the French Government introduced last year an amplified system of life and accident insurance for the benefit of agricultural and industrial laborers. The following is a translation of the principal provisions of the law establishing it. France is probably the only country where Government may go to such a length in substituting public for private action.

Article I. Two funds are hereby created under the guarantee of the State: One for the insurance of life and the other to secure life-annuities to persons, who, in the pursuit of agricultural or industrial labors, have become permanently disabled, and to furnish pecuniary aid to the widows and minor children of such laborers.

Art. II. Insurance shall be effected either by a single payment or by annual payments of fixed premiums. The sum to be paid on the death of insured persons is regulated by tables: 1st. Of compound interest at four per cent., and 2d. of mortality according to Deparàeux. Six per cent. shall be added to the premiums charged conformably to these tables.

Art. III. No insurance, effected less than two years before the death of the insured, is valid. In this case, the premiums paid are refunded to the heirs and successors, with simple interest at the rate of four per cent. The same takes place if the death of the insured, at whatever time it may occur, is the result of exceptional causes as defined in the policies.

Art. IV. The amount insured shall not exceed three thousand francs. One-half of it shall be neither assignable nor liable to seizure for debt, with the condition that the amount thus reserved, shall not be less than six hundred francs.

Art. V. No one under sixteen years of age can effect an insurance.

Art. VI. In default of the payment of the annual premiums within a year after they are due, the policy shall become void. In this case the payments already made, after a discount for the risk incurred, shall be considered as a single payment giving right to a corresponding insurance, payable on the death of the insured. The discount for the risk incurred is fixed by the tables.

Art. VII. The Mutual Aid Societies, authorized under the decree of March 26, 1852, shall be permitted to contract for collective insurance, on the basis of a list of the names and age of their members, to the amount of not exceeding one thousand francs for each member. Such collective insurance shall be valid only for one year, and be made according to special tables calculated on the basis indicated in Art. 2. It can be supplemented by individual insurance.

Art. VIII. Insurance against accidents shall be effected annually. The insured person may pay at his option eight, five, or three francs per annum.

Art. IX. The "Accident Insurance Fund" shall be composed of — 1. The total of the annual premiums paid by the insured; 2. A yearly subvention from the State, fixed for the first year at one million francs; 3. Of donations and legacies.

Art. X. For the better regulation of the life-annuities to be granted, accidents shall be divided into two classes, to wit: 1. those resulting in absolute incapacity for any labor; 2. those resulting in incapacity for the habitual labor. The annuities allowed for the latter class shall be but one-half of those allowed for the former.

Art. XI. The life-annuities due to insurers under the preceding article, shall be paid through the general pension-fund. For this purpose the pension-fund is to receive in case of accidents of the first class above named — 1. An amount equal to three hundred and twenty times the annual premium of the insured. 2. An equal additional amount derived from the resources indicated in Secs. 2 and 3 of Art. IX.

The annuities, corresponding to the annual premiums of five and three francs, shall not be less than two hundred and one hundred and fifty francs respectively. The amount necessary to raise them to these figures in given cases shall be taken from the resources named in Secs. 2 and 3 of Art. IX.

Art. XII. The relief to be given in case of the death of the insured to his widow, or, if he is single, or widower without children, to his father or mother (but only in case either parent is over sixty) shall be equal in amount to two years' of the annuity, to which the insured would be entitled. Minor children of insured persons are entitled to the same amouut.

Art. XIII. No life-annuities can be either assigned or seized for debt.

Art. XIV. No one under twelve years of age can effect an insurance against accidents.

Art. XV. Public offices, industrial establishments, railroad companies and mutual aid societies may effect collective insurance against accidents, for the benefit of their members or employés, in the manner indicated in Art. XII.

Municipal authorities may in the same way insure companies of firemen and their subdivisions against risks, either in the public service or in the industrial pursuits, in which the firemen are engaged. No insured person can secure more than one life-annuity. If in collective insurance several annual payments should be paid for the same person, they will be treated as one payment, without, however, if exceeding eight or five francs, giving right to higher pensions than those corresponding to said premiums.

Other sections of the law provide for the compilation, under the direction of the Government, of new mortality tables and of annual tabular statements showing the number, nature and cause of accidents in the various pursuits of the laboring classes.

NOTICES OF PUBLICATIONS.

Library of Education. — New York: J. W. Schermerhorn & Co. 1869.

In the art of making fine books it is no wonder that this country falls short of Europe; and in the present condition of our finances, it is perhaps impossible that we should make books as cheaply as they can be and are made in England and on the Continent. There is, nevertheless, a relative cheapness which we might attain, if we were duly impressed with the principle on which foreign publishers proceed in their manufactures. That principle may be stated about as follows: Within certain limits, the apparel of a book should be inversely proportioned to the value of its contents. These limits are two: accurate typography and legibility. When these are secured, the better the work itself — the greater the labor or expense in preparing it — and especially the more desirable it is that it should be available for everybody — then too little cannot be spent on the paper and binding. Hence it is that some of the most important works in Germany, for example, are printed on dingy paper and bound in paper covers, and altogether present an appearance which we should despise for its cheapness alone. It is thus that the great serials of Brockhaus and other publishers, that lexicons and histories, the *chefs-d'œuvre* of science and technology, are dressed for sale on the lowest terms, and with the poorest purchasers in view.

So long as a book is regarded as an end, and not a means — a means of culture and enlightenment — the principle just laid down will meet with little favor. In fact it has never so much as been conceived of in this country, for that class of works to which it is applicable. Singling out the publishing houses which would probably obtain all the suffrages as first in the character of its publications, we shall probably do Messrs. Little, Brown & Co. no injustice, when we venture to assert that the enterprises which have redounded so much to their credit, have been based on the requirements of a fastidious and wealthy few, rather than upon the needs and upon the poverty of the multitude of readers and students. Such monuments of American industry and scholarship as the works of Bancroft and Palfrey and Sabine, of Sparks and Pickering and Greene, of Frothingham and Rives and Parkman — a list that is household among

scholars and yet not popular, Mr. Sparks hardly excepted — assuredly were made for those gentlemen who are accustomed to be told that they cannot "be without" certain works and still pretend to keep libraries, and not for those to whom the substance of a work is everything, and its form — so it can be read without difficulty — comparatively nothing.

Three years ago the salaries of clergymen in the State of Connecticut were officially reported to be as follows:

"Three pastors have no pay whatever; one has $100; one, $200; one, $300; nine have $400; thirty-three, $500; one hundred and four, $1000; forty, $1,500; sixteen, $2,000; four, $2,500; and three, $3,000 a year. No salary of more than three thousand is mentioned." Averaging this by counties, by which the relation of the chief cities (with public libraries) to salaries is perceived, "the average remuneration in Windham County, is $653; in Tolland County, $728; in Middlesex County, $819; in New London County, $848; in Litchfield County, $880: in Fairfield County, $1,044; in Hartford County, $1,060; in New Haven County, $1,127."

Mr. Warren Johnson, in his late "Fifteenth Annual Report" as Superintendent of the Common Schools of Maine, (Augusta: 1868,) gives the following comparative statement of the average monthly wages of Teachers in four of the New England States, p. 69:

	Males.	Females.
Maine, ...	$29.50	$11.76
New Hampshire, ...	34.64	19.78
Massachusetts, ...	66.92	26.44
Connecticut, ...	52.05	24.91

Neither country Clergymen nor country School Teachers, it is evident from the above figures, can hope to own the costly works which would do so much to qualify them for their professions, and debarred from which they must inevitably suffer in the public estimation, and incur the reproach of ill-performance and incompetency. It is scarcely too much to say that the heavy paper and needlessly strong and elegant bindings of standard works, are the cause of mental starvation to thousands of well-educated men, possessed of deep longings for knowledge, cultivated tastes, noble aspirations for service to mankind, and yet hopelessly bound to a precarious salary, which at the best is wholly inadequate either to their material or intellectual support, or to the proper education of their children.

Some such considerations as the foregoing, we are informed, have induced Messrs. J. W. Schermerhorn & Co., of New York, to under-

take an experimental series in 32-mo., which they call the "Library of Education." The size and style, according to their announcement, are copied quite closely from a French model known as the "Bibliothèque Nationale." The publishers at first fixed the price at fifteen cents per volume, but as the public seemed to consider the first three volumes sold at this rate a little too unpretentious in appearance, they subsequently raised it to twenty-five cents in order to be able to improve the series in point of form. Four volumes have been issued so far. These are: (Vols. 1, 2,) Locke's "Thoughts concerning Education," and Milton's letter to Master Hartlib, on the same subject, with lives of both authors; (Vol. 3) Horace Mann's Report for 1842, on the study of Physiology in the common schools, with life. The fourth volume promises a reprint, by special permission, of Mr. John Stuart Mill's St. Andrew's Discourse; and the field proposed to be occupied covers Rousseau's "Emile," Richter's "Levana," Pestalozzi's "Leonard and Gertrude," Xenophon's "Cyropædia," etc., etc., along with such practical aids in teaching as Sir Edmund Head's "Shall and Will," Professor De Morgan's Essays on Mathematical Instruction, etc., etc. Even at the enhanced price, the series will still be cheap, especially when one considers that some of the works to be printed are not easily obtained in English, while some (like Pestalozzi's "Leonard and Gertrude") have never been wholly translated into our language.

Should success attend this plan, the intention is, we believe, on the part of the publishers, to embrace works that do not come under the head which, as publishers of an educational magazine and of text-books, they naturally first selected. And they may even advance from this handy if somewhat insignificant edition, to the duodecimo and octavo, still furnishing the best matter in the cheapest dress consistent, as we have before remarked, with substantial accuracy in the text and a clear impression.

It is probably too early to pronounce on the success of this experiment, which is not without its mechanical difficulties, and which is liable to be misunderstood. Of course, unless account be taken of the object of the publishers, the purchaser may condemn the series for its unhandsome appearance, and thus make its very merits a fatal objection to it; and then too, what is cheap is always suspicious. But we trust that a better fate may befall the "Library of Education," not more for its own sake than for its probable usefulness as an example of what we may gain, for the diffusion of knowledge, by adopting the practice of the greatest book-producers in the world.

Bibliothèque Nationale. — The "Bibliothèque Nationale," referred to in the preceding notice, consists of a collection, in the cheapest form, of the standard literary productions of different nations. This publishing enterprise has a curious history. In 1863, it occurred to some journeymen-printers, employed in one of the largest printing establishments in Paris, that they could contribute a good deal towards general enlightenment by making the literary treasures of France and other countries accessible to the great body of the people. After due deliberation, they concluded to attempt the attainment of this object by the publication, with their own hands, of a series of volumes containing the best productions of the human mind, the cheapness of which should be limited only by the conditions of legibility and durability. They communicated their project to a number of fellow-craftsmen and the result was that one hundred and twenty printers agreed, in order to make up the capital needed to carry out the project, to pay each one franc a week for a year into a common fund. The contributors subsequently formed a coöperative society, which commenced the publication of the series with the small capital, raised in the manner stated, before the close of the year, and, thanks to the liberal support of the press, continued it to this day. The volumes now number over a hundred, many of which have passed through five and six editions, and they have found a sale to the extent of over two millions of copies. They contain from one hundred and twenty to one hundred and forty pages in 32-mo. each; are printed in clear type on coarse but strong paper, and sold for the extraordinarily low price of four cents each. For a substantial binding in cloth four cents more is charged.

Encouraged by the success of the "Bibliothèque Nationale," the associated printers about two years ago started in the same way an educational series under the name of "École Mutuelle" (Mutual School.) Some thirty volumes, treating of grammar, arithmetic, geometry, natural sciences, history, etc., etc., have already been issued and widely sold.

It will be difficult to find in the humbler walks of life a more creditable instance of disinterested and intelligent labor for the common good than the praiseworthy enterprise of these French printers, which, next to the periodical press, is doing more than any other single agency to spread light among the French masses.

Proceedings of the International Statistical Congress.— We are indebted to our Corresponding Member, Signor Scalia, Inspector of Prisons for the kingdom of Italy, for a copy of the highly

valuable *Proceedings of the Sixth Session of the International Statistical Congress*, assembled at Florence during the week ending October 5, 1867. This was the last session of this important body of delegates from the countries of Europe, which first met in 1853 at Brussels, and has since held sessions at Paris (in 1855,) at Vienna (in 1857,) at London (in 1860,) and at Berlin (in 1863.) The proceedings at all these gatherings were interesting, and they increase in importance with each session, as the organization of the countries represented becomes more available for statistical purposes. The subjects discussed at Florence, either by the general body of delegates, or by the Committee of Organization, were mainly the following: (1.) The Theory of Statistics, and their Best Form of Organization, and under (2.) Practical Statistics, the questions of Census-taking, Tables of Mortality, Life Insurance, Unification of Weights, Measures, and Coins, Pauperism, Crime, Sanitary Regulations, Public Instruction, Schools of the Fine Arts, Banking and Currency, Municipal Government, etc. It will be seen that these questions fall entirely within the sphere of Social Science, of which, indeed, Statistics form a considerable part. From the mass of facts and suggestions contained in the six hundred pages of this volume, we select a few, translating from the French, in which language the proceedings are reported.

I. Census-Taking. — There were long discussions on the proper time and manner of taking the Official Census of Nations, on which we find many things worthy the consideration of the Congressional Census Committee lately appointed in our country. Dr. Engel, the distinguished head of the Prussian Bureau of Statistics, declared the opinion of the Congress to be that every Census should be taken at the end of the calendar year, (December 31,) in decennial or quinquennial periods. This date was chosen because at that season of the year the absence of the population from its legal domicile is at a minimum, more sailors, merchants, travellers, laborers, etc., being then at home than at any other period. He also recommended that the Census blanks should indicate, so far as possible, the time and place of absence, and its occasion. A proposition occasioning some difference of opinion was, that in family blanks a column should show the degree of consanguinity between the father and mother, and that special efforts should be made to obtain the number of foundlings and illegitimate children. Dr. Engel advocated the former, and did not object to the latter, but Dr. Farr and M. Legoyt protested against both as useless, and likely to mislead rather than to enlighten the public by the results obtained. Professor Mantegazza said that in

France, since 1863 there had been an attempt to collect facts in regard to marriages of consanguinity, and their effect upon the children; the Minister of Agriculture had issued circulars to local and municipal authorities calling for information of this kind. He had himself, in the Argentine Republic, addressed circulars to physicians on this subject, but had only collected the facts in eighty cases. He thought that, in a single census statistics of value relating to marriages of consanguinity could be obtained. Dr. Farr did not believe this could be done.

II. Tables of Mortality. — On this subject the Congress voted that it is desirable to have official tables published by Government, corresponding to the various forms of life insurance in vogue in each country. These tables being published and revised whenever the statistics of mortality are revised, would serve as a guarantee to individuals. It was also recommended that Governments require returns from life insurance companies, showing what has been the mortality among those insured, and that these returns be tabulated and published. This last proposition was made by M. Legoyt, who gave some interesting facts about tables of mortality in France. He said that there are in use, among the French, three chief tables of mortality — that of Deparcieux, calculated upon lives selected according to the plan of Tonti, the Italian Actuary of Louis XIV's time (Tontine lives,) and dating back to the beginning the last century; that of Duvillard, calculated upon a number of miscellaneous lives at the end of the last century; and, finally, that of Montferrand, calculated from mortuary tables comprising the years 1834 – 1847. Of these, Deparcieux's is a table of slow mortality, Duvillard's of swift mortality, while Montferrand's, which is the most recent, indicates a slower mortality even than Deparcieux's Tontine table.

Now the French insurance companies do not take for the basis of their calculations this recent and more exact table of Montferrand; but, when they insure upon survival, they use Duvillard's old table of short lives, and when they insure against death they use Deparcieux's table, a hundred years older, which exhibits a slow mortality. The French Government has allowed this hitherto, from a wish to encourage life insurance, which has advanced slowly in France, in comparison with its rapid extension in England and America. But now the Government is disposed to compel the companies to use tables of mortality based upon the actual deaths of persons insured by them; and this disposition has been strengthened by a curious discovery. In 1850 the Government opened an office for annuities,

or life endowment policies, for the benefit of working men, called *La Caisse de retraite pour la Vieillesse.* In this office they received deposits upon which they began to pay annuities when the depositor reached the age of fifty, and the premiums were intended to be so calculated as to pay the annuity and reimburse the deposit on the death of the annuitant. For this calculation the old Tontine table of Deparcieux was used, but it was soon found that the mortality of selected lives in 1700 exceeded the ordinary mortality among working men in 1850 – 60. A greater number of the depositors reached the age of fifty than was calculated, and the number of years that these persons drew their annuities was also greater than was expected.

III. Life Insurance. — Intimately connected with the preceding topic, is that of Life Insurance which was discussed in this connection. Mr. William Rey said that there were eight billions of francs insured on lives in England, and that two hundred and fifty millions of francs are paid out every year to satisfy policies. Mr. Samuel Brown, the eminent English Actuary, stated the sum insured in England as four million pounds, equivalent to ten billions of francs. The first English company, the *Equitable*, was established a little more than a century ago; it now has policies amounting to twenty millions of pounds. The sums insured in Germany and the United States were estimated by Mr. Rey at forty millions of pounds in each country, and this rapidly increasing; France comes next in order. In England, said Mr. Brown, a fourth part of all the companies are *mutual;* and they are made up from upper, the middle, and the commercial classes. He added the important announcement that the Institute of Actuaries, of which he is a Vice-President, is about to publish a work showing the mortality results of the English and Scotch companies for a period of thirty years, and including two hundred thousand lives, of which twenty thousand were of women. No work of such utility has ever been written on this subject.

IV. Births, Deaths and Marriages. — From a paper read by Dr. Farr, it appears that there are, to each one thousand persons, in

	Births.		Marriages.		Deaths.
The United Kingdom,	35	:	17	:	23
In France,	27	:	16	:	24
In Prussia,	42	:	17	:	26
In Austria,	39	:	16	:	30
In Italy,	38	:	18	:	30
In Spain,	38	:	8	:	33

The mortality in the British cities is much greater than 23, being 24 in London and Bristol, 25 in Birmingham, 26 in Dublin and Edinburgh, 31 in Leeds, 33 in Glasgow and Manchester, and 36 in Liverpool, in the year 1865. In the eleven largest cities of the kingdom, containing nearly six millions of inhabitants, the mortality per thousand in 1866 was twenty-nine.

V. Spanish Statistics. — From a communication made by the Spanish Bureau of Statistics, a few figures may be taken, which will now be of more interest than ever before, as throwing light on the condition of Spain. By the Census of 1860, taken on Christmas Eve of that year, the population of Spain was 15,673,481, of whom 7,765,508 were males and 7,907,973 were females. The increase of population since 1857 had been 209,196, at which rate it would double in 181 years. The present population would therefore be not far from 16,300,000. Of the population in 1860 more than half had never married (8,887,369,) of those then married there were 5,721,647, and 1,064,262 widows and widowers,— the former being about twice as many as the latter. Less than 35,000 of the whole number were foreign born. Those who knew how to read and write numbered only 3,129,921, of whom 715,906 were women, and 2,414,015 were men; only about one female in seven knew so much as to read, while 11,837,391 (5,034,545 males and 6,802,846 females) could neither read nor write. Of the births from 1858 to 1862, less than six per cent. were illegitimate, showing a state of morals better than that of Scotland. In Madrid and some of the cities, however, the proportion is four or five times as large. In 1866 there were in Spain 318 theatres, with seats for 156,604 people; 101 bull-fight rings, with seats for 526,047, and 465 actual bull-fights.

Investigations in the Military and Anthropological Statistics of American Soldiers. — (Published for the United States Sanitary Commission by Hurd & Houghton, New York: 1869.)

The large volume, issued under the above title from the Riverside Press, is a fit continuation of the memoirs of the United States Sanitary Commission. It is a monument of painstaking effort in statistical compilation equally creditable to the Editor, Dr. Benjamin Apthorp Gould and to his numerous co-laborers, who are named in the preface. Dr. Gould, who has been in charge of the Statistical Bureau of the Commission since June, 1864, disclaims any particular fitness for the arduous work of making the vast material, collected at the instance of the Commission under the supervision of himself and of his predecessor, Mr. E. B. Elliott of the Treasury Department, accessible to

the scientific and general public — a modesty, which is not borne out by the contents of the volume. We can safely affirm that no compilation equally broad in scope and redundant in details, has ever before been made anywhere or at any time. The contents are divided into sixteen chapters, as follows: 1. Military population and enlistments in the loyal States; 2. Nativity of United States Volunteers; 3 and 4. Ages of volunteers and recruits; 5 and 6. Statures and complexions; 7. Previous occupations; 8–11. Mean dimensions and proportions of body and of head, weight and strength; 12–14. Pulmonary capacity; respiration and pulse; vision; 15. Miscellaneous characteristics, and 16. Military service. Crammed with valuable data, as the volume is, it is not as complete as the Editor wished it to be. It was intended to embody, in addition to the actual contents, a discussion of Hospital Statistics, both in their medical and military relations, the collection of regimental returns from the rolls of the Adjutant-General in Washington, the statistics of colored troops, and the physical characteristics of the prisoners of war. But this interesting matter is omitted in consequence of the refusal of Mr. Stanton to permit such researches among the archives of the War Department as were requisite in order to complete the information upon the several subjects in possession of the Commission. But we feel sure that, notwithstanding these involuntary short-comings, the volume will be welcomed by military students, statisticians, and anthropologists everywhere as one of the richest mines of professional knowledge ever opened to them.

Our limited space forbids us to extract more than a few points from the mass of interesting material. In the chapter on "Previous Occupations," it is shown, that the number of professional men who enlisted in the ranks, was 92 among volunteers and 102 among recruits in each 10,000. For officers and men taken together it was about 321 in each 10,000. In the chapter on "Miscellaneous Characteristics," the results of an enquiry into the education of the loyal soldiery are given. From them it appears, that, of 10,472 soldiers examined, 34 had received a professional, 59 a collegiate, 409 a high-school, 4,269 a good common-school, 4,950 a limited common-school, 145 a slight and 606 no education. Of the illiterate, New England contributed but 30, the other loyal States 331; Ireland 106; Germany 15; Canada 92; and other foreign countries 32. In the chapter on "Military Services," the effect of long marches on the health of the soldiers is discussed, among other subjects. An enquiry was instituted immediately after the battle of Gettysburg, under the direction of Mr. Fred. Law Olmsted, then Secretary of the Com-

mission to ascertain the general effect of the hurried and frequently severe marches to which our men were subjected before that memorable struggle, and how this general effect became modified under certain conditions of diet. The experience of 144 regiments was ascertained, which had marched 20 – 30 miles a day for several weeks. The result of the enquiry is thus summed up:

"Of the fifty-seven regiments whose rations comprised fresh meat, thirty nine in the opinion of their colonels, and twenty-three in that of their surgeons, enjoyed as good health as when in camp, or even better. There were but three which suffered severely from sunstroke, and of the eighteen regiments which seemed to incur disease by the march, all but three suffered only from simple diarrhœa. Yet these severe marches were under a midsummer sun, in a warmer latitude than that to which the men belonged.

"The three regiments to which two kinds of salted meat were furnished, did not suffer in general health, although two of them were for a time extremely exhausted.

"Of the fifty-one regiments which received no meat excepting salt pork in full rations, twenty-four in the opinion of their colonel, and fourteen in that of their surgeon, did not suffer in health from the march otherwise than by sunstroke, but ten of them suffered severely from this infliction. The same is true of four according to the colonel, and two according to the surgeon, of those regiments which were placed upon short rations of the same kind. Special tendency to disease was manifested in nineteen of these regiments, seven of suffering from malarial or typhoid fever.

"All accounts agree in representing the spirits of the army on the march as excellent. They bore their hardships cheerfully and hopefully, and the officers very generally attributed the good health of the men in a great degree to their state of mind, and confident anticipation of the decisive victory."

The facts quoted tend to confirm all that has been said during and since the war relative to the superior intelligence and physical power of the volunteer forces.

Public Parks. — (By John H. Rauch, M. D. Sanitary Superintendent and Registrar of Vital Statistics of the City of Chicago. S. C. Griggs and Company. 1869.) The pamphlet, bearing this title, contains an elaborate paper on the effects of Public Parks upon the moral and physical condition of the inhabitants of large cities, which was read by Dr. Rauch last winter before the Chicago Academy of Sciences. The paper is evidently the result of careful thought and

research, and reveals not only scientific knowledge, but literary ability of no mean order on the part of the author. It was suggested by the local agitation of the question of providing the commercial emporium of the northwest with several large Parks, and forms a powerful argument for the introduction of these healthful improvements there and elsewhere in the United States. After some historical reflections, the author gives a description of the leading Parks of Great Britain and Continental Europe, followed by an account of the Parks in the leading cities of the United States. In this part, very interesting details as to the extent, style, cost, etc., etc., of the Parks of Boston, Providence, New Haven, New York, Brooklyn, Philadelphia, Baltimore, Washington, Cincinnati, St. Louis, Cleveland, Detroit, Savannah, New Orleans and San Francisco are given. Arrived at Chicago in his survey, the author, after showing the meagre supply of Parks in that city, demonstrates at length the necessity, on climatical and sanitary grounds, of furnishing the inhabitants with "breathing places" more liberally. The general part of his scientific demonstration, which might have been a little more concise without lessening the weight of the argument, is applicable to all cities. Altogether the pamphlet of Dr. Rauch deserves the widest circulation.

Rapports du Jury International de L'Exposition Universelle de 1867. — (Paris: Paul Dupont. 1868.)

We are under obligations to M. Michel Chevalier, the distinguished economist, for a full set of the reports of the International Commission upon the Universal Exposition of 1867. The reports are embodied in thirteen volumes 8mo., numbering from 400 – 1000 pages each, and printed at the expense of the French Government. Their value may be estimated from the fact that they touch not only upon every conceivable branch of commerce and industry, but upon educational, artistic and economic topics, and that they represent the result of the observations on the *Champ-de-Mars* of no less than two hundred and fifty experts of different nationalities.

The whole series was published under the direction of M. Chevalier, whose experience as official editor of the Reports of the Exposition of 1862, qualified him peculiarly for the work. The Exposition, it will perhaps be remembered, was divided into ten general groups or sections, and ninety-five sub-sections or classes, with a special section, intended to illustrate recent improvements in the moral and material relations of the poorer classes. The thirteen volumes treat successively of the vast material comprised in these several divisions. The first and thirteenth volumes are of most

interest to the general reader. The former includes a resumé, in five hundred pages, of the contents of the other volumes; a review of the present condition of the Fine Arts, as exemplified in the first general group, and the report of the International Sub-Committee for the special section referred to. The resumé opens with a lengthy introduction from the pen of M. Chevalier, worthy alike of his literary and scientific reputation, in which he surveys, from a philosophic stand-point, the progress of man in the spheres of mind and matter since the preceding exhibitions. In the first pages he makes some interesting statements in regard to the numerical proportions attained by the last Universal Exposition as compared with its forerunners. It appears from them, that, while the highest total number of visitors reached at any preceding Exposition was 6,221,000 (at London in 1862,) the visitors to that of 1867 numbered, in the aggregate, over ten millions. The number of exhibitors in 1862 was 28,653, against 50,226 in 1867. Even more noticeable than this numerical preponderance was the more general participation of the various peoples of the earth. Every European nation, from the great powers to the miniature republic of Andorra, was represented, as were most of the countries of the American, Asiatic and Australian continents. Beyond the immediate results of this veritable "World's Exposition" in familiarizing the peoples represented with their respective powers of invention and production, M. Chevalier anticipates from that great jubilee of Art, Commerce and Industry a general acceleration of the march of civilization, and above all a more rapid tendency towards the solidarity of material, moral and intellectual interests, to attain which should be the common aim of all human aspirations.

The report of the Special Committee charged with the investigation of recent improvements in the condition of the laboring classes, is one of the most instructive features of the series. It is made up of a great number of descriptive accounts of public institutions, industrial establishments, coöperative enterprises and the like, remarkable for the practical benefit they confer upon the working people. These accounts, though not as comprehensive as one might wish them to be, comprise a surprising array of facts showing the humane tendencies of our age in a very striking manner. They deserve the attention of every student of social economy.

The contents of the thirteenth volume are closely related to the part of the first volume just mentioned. They treat of public instruction, including the education of children and adults; of technical, agricultural and commercial schools; of asylums; of public libraries and collec-

tions, as existing to-day in different countries, and of the progress made of late years in the manufacture of cheap articles of wear and domestic use specially intended for the poorer classes.

The experts, charged with the preparation of the reports contained in the other volumes, very wisely did not attempt to go into elaborate details, but confined themselves to general conclusions, making special allusions only to objects of novelty and particular merit. Nevertheless their labors together form what may well be termed a complete encyclopædia of modern industry, and as such will be of more than passing value.

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CURRENT RECORD OF THE ASSOCIATION.

The principal events in the history of our Association since the appearance of the first volume of Transactions, have been the Annual Meeting, held on the 13th of October last, in Boston, and the General Meeting, which took place, in New York, on October 26, 27, and 28.

The former was attended mainly by members from the New England States. The first business was the consideration of the amendments to the Constitution and By-Laws proposed and submitted in behalf of the Executive Committee. Drafts of both instruments were read and referred to a committee. The nomination of officers was entrusted to another committee.

The President then proceeded to deliver the Annual Address. In his opening remarks, he paid a tribute to his predecessor, Professor William B. Rogers, who was compelled by sickness to abstain from active participation in the labors of the Association. He referred briefly to the history of the Association, and to the favorable auspices under which it entered upon the fifth year of its existence. He dwelt upon the new features introduced in the course of the year in the organization of the Association in the Standing Committees in each of the four departments, and in the local Executive Committees in New York and other Eastern cities, both of which he showed had greatly added to the working capacity of the Association. He enlarged upon the work of the Association during the year, and in conclusion spoke of its great opportunities for usefulness, of which every day brought new evidence.

The address of the President was followed by the reading of reports from the officers of the Standing Committees on Education, Health, and Jurisprudence, in which an account of the work in these departments was given.

The Secretary next read a lengthy report of his labors since he assumed office in the preceding month of November.

The Secretary was followed by the Treasurer, who read a

statement of the receipts and expenditures of the Association, from which it appeared that, since the last Annual Meeting, the former amounted to four thousand eight hundred and sixty-eight dollars, and the latter to four thousand eight hundred and forty dollars.

The Committee on the Constitution and By-Laws, having been invited to report, submitted the drafts which had been referred to them, without amendments, and with the recommendation that they be adopted, in which the meeting concurred.

The Committee on Nominations, under the provisions of the new Constitution, reported the following list of officers for the year 1869–70:

President, Samuel Eliot.
Secretary, Henry Villard.
Treasurer, James M. Barnard.

Executive Committee.

Emory Washburn,	Charles Francis Adams, Jr.,
J. S. Blatchford,	Miss A. W. May,
G. G. Hubbard,	Mrs. C. H. Dall,
John D. Philbrick,	Mrs. S. Parkman,
Dr. E. Jarvis,	F. B. Sanborn.

A revised list of Corresponding Members of the Association was presented and accepted.

The President read a communication from the Secretary of the New York Prison Association, announcing the proposed holding of an International Congress of persons interested in prison reform in Europe, during the next or the following year. The President and Mr. F. B. Sanborn were appointed delegates to the Congress. The meeting then adjourned.

As already stated, the General Meeting in New York was held on Tuesday, Wednesday, and Thursday of the last week of October. The programme arranged by the Executive Committee was fully carried out, with a single exception, namely, the omission of the paper on Technical Education, by Professor D. C. Gilman, of Yale College, who was unable to be present. All the papers read on the occasion are printed in

this volume, excepting that of Mr. George William Curtis, on Civil Service Reform, which is not published, at his request. The meeting voted to address the memorial printed on page 157 to Congress. Mr. David Dudley Field was requested to represent the Association at the International Law Conference, to be held at Paris in 1870.

The Session attracted much attention and produced an excellent effect, of which the liberal pecuniary aid extended to the Association by its friends in New York, and the numerous accessions of new members, there and elsewhere, since the meeting, furnish the best evidence.

The Philadelphia members of the Association in November undertook the formation of a regular Branch of the Association in their city. Their efforts were successful, and an organization, similar to that of the parent Association, was perfected before the close of the year. The executive officers are: Hon. William Strong, President; Mr. J. G. Rosengarten, Secretary; and Mr. Clarence H. Clark, Treasurer. The Philadelphia Branch already numbers over a hundred members.

A statement of the particular objects at present pursued by the Association is due to the members who are not in regular communication with the General or Local Executive Committees.

In the department of Education, the compilation of Rules and Regulations, and Standard Catalogues to facilitate the formation of Public Libraries, in which a number of competent members have been engaged since last spring, is nearly completed, and will soon be offered to the public in print.

The Standing Committee in the same department have given constant attention since last winter to the subject of Popular Education in Art. The establishment of Museums of Art and the introduction of reproductions of classic works of art in public schools being considered the best means of developing better artistic taste among our people, the Committee directed their attention mainly to these objects. The methods by which they propose to attain them are mentioned in the latter part of this volume.

The same Committee have also considered the subjects of

Industrial Schools in connection with common-school education, and of Nautical Schools for the commercial marine, and plans for the establishment of such are in the course of preparation. The low condition of American chartography and the means of improving it, as well as the shortcomings of the text-books used in our public schools, constitute further subjects of enquiry.

The principal subject now occupying the attention of the Standing Committee on Health is the publication, under the auspices of the Association, of popular tracts on sanitary topics.

In the department of Economy, the principal undertaking is the preparation of a hand-book for immigrants, the proposed character of which was described in the first number of the JOURNAL. The collection of material for it has been progressing for some months.

The Standing Committee on Jurisprudence have been and are still endeavoring to prepare the way for reforms in the administration of criminal justice, in the use of the pardoning power, and in other directions. The same Committee, in compliance with the request of Mr. John Stuart Mill, have recently made an enquiry into the history of the ballot in this country.

Mr. John A. Lowell, the Trustee of the Lowell Institute of Boston, having kindly assigned a course of lectures to the Association, the executive officers have been engaged for some months in making up a list of twelve lecturers from among the members. It is with no small satisfaction that they announce their complete success. The following is a list of the lecturers and subjects:

C. C. Perkins—Art Education in the United States.
F. L. Olmsted—Public Parks.
Professor Francis Bacon—Civilization and Health.
S. A. Duncan—The American System of Patents.
Professor D. C. Gilman—Scientific and Technical Instruction, abroad and at home.
Professor Benjamin Peirce—The Coast Survey.
Professor Raphael Pumpelly—The Chinese Question.

E. L. Godkin—Rationalism in Legislation.
William B. Ogden—The Material Growth of the North-west.
Dr. George Derby—Air in some of its Relations to Health.
President T. D. Woolsey—Definition and Sphere of the Police Power.
David Dudley Field—Representation of Minorities.

The course will begin in the latter part of February, and terminate early in April.

The lectures will form the contents of another volume of TRANSACTIONS, which will be issued in the course of the spring.

IMMIGRATION.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 27, 1869.

THE subject of the paper which I am about to read has been announced too vaguely. I do not propose to speak of immigration in general. I shall treat of immigration only in its connection with this country, and especially with the port of New York. I shall lay before you conclusions drawn from a long and careful personal observation of causes and results, failures and successes. I shall discuss my subject under the following heads:

1. Why do people emigrate, and who are those who emigrate?
2. Why is the United States the favorite land of the emigrant?
3. What is the capital value of immigration to this country?
4. How does immigration affect the population and wealth of this country?
5. Is immigration a matter of State or of national concern?

I.—WHY DO PEOPLE EMIGRATE, AND WHO ARE THOSE WHO EMIGRATE?

From the remotest ages down to the present day, from the first Phœnician and Greek colonies down to the settlement of our Pacific coast, two principal causes have always induced emigration and led to the establishment of new states and empires, viz., political or religious oppression and persecution, and social evils, such as want of prosperity or insecurity, lack of employment, famine, and high prices of living in general. In modern times, either of these causes has proved powerful enough to produce emigration on a large scale from certain countries. People who are happy and comfortable at home

do not emigrate; the poor and oppressed only, who cannot find a fair reward for their labor in the land of their birth, or who feel themselves obstructed and thwarted in their religious or political aspirations, seek to better their condition by a change of country.

The territory which constitutes the present United States owes its wonderful development mainly to the conflux of the poor and outcast of Europe within it. The adventurers who discovered and first settled it belonged to the feudal aristocracy of Europe. Being neither able nor willing to work, they failed and perished, and gave way to the so-called lower classes of society—to the sturdy farmer and the industrious mechanic. Feeble as their efforts were in the beginning, the toils and sufferings, the patience and perseverance of these voluntary and involuntary exiles have, in a comparatively short time, built up a powerful commonwealth, the proud structure of this Republic, which in itself is the glorification, the epopee of free and intelligent labor.

In order to better understand the subject, it is necessary to glance back at the condition of immigrants to this country in the last century. The great majority of them, at that period, were very poor people, so poor that they could not pay their passage, and in order to meet the obligations incurred by them for passage-money and other advances, they were sold, after their arrival, into temporary servitude. During all the last century, the prepayment of the passage was the exception, and its subsequent discharge by compulsory labor the rule. The ship-owners and ship-merchants derived enormous profits from the sale of the bodies of emigrants, as they charged very high rates for the passage, to which they added a heavy percentage —often more than a hundred per cent.—for their risks. But the emigrants suffered bitterly from this traffic in human flesh. Old people, widows, and cripples would not sell well, while healthy parents, with healthy children, and young people of both sexes, always found a ready market. If the parents were too old to work, their children had to serve so much longer to make up the difference. When one or both parents died on the voyage, their children had to serve for them. The ex-

penses for the whole family were summed up and charged upon the survivor or survivors. Adults had to serve from three to six years, children from ten to fifteen years, till they became of age; smaller children were, without charge, surrendered to masters, who had to raise and board them. As all servants signed indentures, they were called "indented servants." Whenever a vessel arrived at Philadelphia or New York, its passengers were offered at public sale. The ship was the market-place, and the servants were struck off to the highest bidder. The country people either came themselves or sent agents or friends to procure what they wanted, be it a girl or a "likely" boy, or an old housekeeper, or a whole family. Among the records of this traffic there is a characteristic anecdote about the wife of Sir William Johnson, the Indian agent, and most prominent man of Western New York, in the middle of the eighteenth century. Catharine Weisenberg had arrived in New York a poor German orphan girl, and had been sold as an indented servant to two brothers, Alexander and Herman Philipps, farmers in the Mohawk Valley. Catharine soon became the belle of the settlement, and was courted by a great many swains; but none of them was rich enough to buy her. Johnson, when passing by, saw her, and at once resolved to make her his wife. He offered one of the Philippses five pounds, threatening at the same time to give him a sound thrashing if he did not voluntarily part with the girl. Philipps knew that Johnson was the man to make good his word, took the five pounds, and sold Catharine to Johnson, who married her at once. The match turned out excellent.

"Robust farmers and sturdy mechanics," says D. von Buelow, the celebrated military writer, who first visited the United States in 1791, "find a very easy market. At times, however, an unsalable article creeps in which remains for a long time on the shelf. The worst of these articles are military officers and scholars. The captain who imports that kind of goods does not know the market. I have seen a Russian captain for more than a week on board of a vessel, heavy as ballast, without being able to obtain a purchaser. He was, in fact, unsalable. The captain of the vessel entreated him to try, at least, to find a

purchaser, and in order to get rid of him, he offered to sell him at a discount of fifty per cent. He sent the captain on shore to make the people take a fancy to him; but it was of no avail, nobody had a mind to buy him. The Russian always spoke of stabbing with bayonets, which, he said, he had often practised against the Turks and Poles. Strictly speaking, the use of the bayonet was the only art he had mastered. Finally, the captain and consignee released him upon his promise to pay his passage after six months, and flattered him with the hope of obtaining a schoolmastership in the country. He really obtained it. What he will teach the boys and girls I do not know, unless it be the bayonet exercise."

Peasants and mechanics generally got along tolerably well. Much, of course, depended on the character of the master. There are instances of immigrants having been treated worse than cattle, and driven to work with blows and kicks, so that the colonial authorities had to interfere. The better educated a man was, the more he had learned at home, the worse it was for him. Hard drinking and suicide were often the fate of the unfortunates of this class. Parents sold their children, in order to remain free themselves. When a young man or a girl had an opportunity to get married, they had to pay their master five or six pounds for each year they had still to serve. Yet a steerage passage never cost more than ten pounds. Runaway servants had to serve one week for each day, one month for each week, and six months for each month of absence. If the master did not want to keep his servant, he could sell him for the unexpired time of his term of servitude. It was a daily occurrence that whole families were separated for ever. In short, the whole system was utterly vicious and little better than slavery. It was only slavery for a term of years, but in all other respects just as cruel and iniquitous as that form of bondage.

This mode of making the immigrant pay his passage died out in the beginning of the nineteenth century. The last sales of passengers are reported in 1818 and 1819 in Philadelphia. We do not hear of indented servants after 1819, when immigration began to consist of a much better and well-to-do class of people,

and the United States first intervened in behalf of this important economic interest.

From 1775 till 1815 immigration had been very slim, partly on account of the American Revolution, and partly on account of the wars ending with the overthrow of Napoleon I. In 1818 Dr. Adam Seybert, member of the House of Representatives from Pennsylvania, in his valuable "Statistical Annals of the United States" (pp. 28 and 29), wrote to the following effect: "Though we admit that ten thousand foreigners may have arrived in the United States in 1794, we cannot allow that an equal number arrived in any preceding or subsequent year, until 1817." Samuel Blodget, a very accurate statistician, wrote, in 1806, that from the best records and estimates then attainable, the immigrants arriving between 1784 and 1794 did not average more than 4,000 per annum. Seybert assumes that 6,000 persons arrived in the United States from foreign countries in each year from 1790 to 1810. Both averages, however, seem to be too large; 3,000 for the first, 4,000 for the second, period named is a very liberal estimate.

The difficulty experienced in disposing of property at satisfactory prices prevented many from leaving the Old World immediately after the close of the Napoleonic wars. But the great famine of 1816 and 1817 drove several thousands over the ocean. Here it may be stated that, from that time forward, the material and moral causes of immigration, above alluded to, regularly governed the numerical proportions of the influx of Europeans into the United States in successive years. To prove the controlling influence exercised over immigration by material misery, on the one hand, and political oppression, on the other, a few statistical data will suffice.

While, in 1826, of 10,837 immigrants 7,709 came from the United Kingdom, in 1827 their number increased to 11,952 out of 18,875, and in 1828 to 17,840 of a total of 27,283; but in 1829 their number fell to 10,594 of 22,530, and in 1830 to 3,874 of 23,322 souls. These fluctuations were due to the great commercial panic of 1826, and the distress in the manufacturing districts of England, as well as the famine in Ireland, which

drove thousands from their homes who under ordinary circumstances would never have thought of emigration.

Again, in Germany, where the abortive revolutionary movement of 1830–1833, the brutal political persecutions by the several state governments, and the reactionary policy of the federal diet, as well as a general distrust of the future, produced an unusually large emigration: In 1831 only 2,395 Germans had arrived in the United States; in 1832, 10,168; in 1833, 6,823; and in 1834 to 1837, the years of the greatest political depression, 17,654, 8,245, 20,139, and 23,036 respectively.

The emigration from Ireland, which from 1822 rose much beyond its former proportions, reached its culminating point after the great famine of 1846. During the decade of 1845 to 1854 inclusive, in which period the highest figures ever known in the history of emigration to the United States were reached, 1,512,100 Irish left the United Kingdom. In the first half of that decade, viz., from January 1, 1845, to December 31, 1849, 607,241 went to the United States, and in the last half, viz., from January 1, 1850, to December 31, 1854, as many as 904,859 arrived in this country. With this unprecedentedly large emigration Ireland had exhausted herself. Since 1855 her quota has fallen off to less than one-half of the average of the preceding ten years.

Almost coincident, in point of time, with this mighty exodus from Ireland was the colossal emigration from Germany which followed the failure of the political revolutions attempted in 1848 and 1849. Already in 1845 and the following years the German contingent of emigrants to the United States showed an average twice as large as in the same space of time previous to the year named. But a voluntary expatriation on a much larger scale resulted from the final triumph of political reaction. The *coup d'état* of Louis Napoleon closed for all Europe the revolutionary era opened in 1848. In the three years preceding that event the issue of the struggle of the people against political oppression had remained doubtful. But the 2d of December, 1851, having decided the success of the oppressors for a long time to come, the majority of those who

felt dissatisfied with the reactionary *régime* left their homes. The fact that the largest number of Germans ever landed in one year in the United States came in 1854 showed the complete darkening of the political horizon at that time. The apprehension of a new Continental war, which actually broke out a year later in the Crimea, also hastened the steps of those who sought refuge in this country. People of the well-to-do classes, who had months and years to wait before they could sell their property, helped to swell the tide to its extraordinary proportions. From January 1, 1845, till December 31, 1854, there arrived 1,226,392 Germans in the United States, 452,943 of whom came in the first five years of this period, and 773,449 in the last five.

But the numerical strength of immigration to this country is not governed by material and moral disturbances in Europe only. While bad crops, commercial and industrial crises, and unfavorable turns in political affairs in the Old World tend to increase immigration, the appearance of the same phenomena in the United States as certainly tends to decrease it. Thus, in 1838 the total of immigration decreased to 38,914, while in the previous year it had amounted to 79,340, and in 1839 and 1840 it increased again to 68,069 and 84,066 respectively. The reason of this extraordinary decrease was the great financial crisis of 1837, which shook the foundation of the whole industrial and agricultural life of the United States. Again, the influx of aliens into New York was smaller in 1858 and 1859 than in any previous year since 1842, for the only reason that the commercial crisis of 1857 had frightened those who wanted to make a living by the labor of their hands. In 1858 and 1859 only 78,589 and 79,322 emigrants respectively arrived in New York, while in 1856 their number amounted to 142,342, and in 1857 to 186,733. In 1860 it rose to 105,162, but in consequence of the breaking out of the civil war, it fell again in 1861 to 65,539, and in 1862 to 76,306. In 1867 the German immigration in New York increased over that of 1866 by more than 10,000, in which last-mentioned year it had already reached the large number of 106,716 souls. Its ranks were swelled in

1867 in consequence of the emigration of men liable to military service from the new provinces annexed to Prussia in 1866, and of families dissatisfied with the new order of things. Hanover contributed the largest share to this kind of emigration. In 1868 the tide subsided again as people began to become reconciled to the sudden change.

In short, bad times in Europe regularly increase, and bad times in America invariably diminish, immigration.

II.—WHY IS THE UNITED STATES THE FAVORITE LAND OF THE EMIGRANT?

There are many countries which, by the fertility of their soil, the geniality of their climate, and other natural advantages, are among the brightest spots on earth, but yet never have attracted immigration to any considerable extent. Thus the Crimea, the lower parts of European Russia, and the Danubian Principalities in Europe, Algiers in Africa, and, on our continent, parts of Mexico, as well as hundred thousands of square miles in South America, are, in regard to natural resources, equal, if not superior, to any part of the United States; and yet the latter attracts the masses of European immigration, and it is pre-eminently the country of the immigrant. Canada lies at the door of the Union; it offers about the same advantages as the Northwestern States, and yet the majority of European immigrants pass through this English colony to become citizens of the Republic.

Why is this, and how can we explain this apparent anomaly? However equal such inducements to emigrants as fertility of soil, salubrity of climate, security of property, and facility of communication may be in different countries, the emigrant prefers the country where labor is best remunerated, where land is cheap, where government does not interfere with him, where no class privileges exist, and where, from the day of his landing, he stands on a footing of absolute equality with the natives. Thus we find that, in this respect also, moral as well as physical causes control emigration. The first are as powerful as, if not more powerful than the latter. In the United

States, both are at work in attracting emigrants, and hence why there is a larger European immigration to this country than to any other on the face of the globe.

The secret of the unparalleled growth and of the daily increasing power of the United States, is that the Government, in its practical working, is confined to the narrowest limits, that it is the agent, not the master, of the people, and that the latter initiate all changes in our political and social life. And similarly, it is the condition of the success of a colony or a settlement that the immigrant relies on his own strength, acts on his own responsibility, and seeks by his own efforts the prosperity which he is sure to find, if undisturbed. All mistakes which he may make, all errors of judgment which he may commit, are of no consequence, if his self-relying spirit is not interfered with. In spite of obstacles and disappointments, he will make his way, and ultimately attain his object. After abandoning the laws, the traditions, and the family ties of his old home, he does not wish to be unduly restrained in his aspirations, or owe responsibility to any one except himself. He will willingly undergo all the hardships and danger incidental to settlement in a new country, provided he finds a free government and no improper interference with his self-adopted mode of life. A colonist, in brief, must be his own master, in order fully to develop his mental and physical resources, and to become a useful agent in building up a free commonwealth.

All modern colonies which were inaugurated by governments have failed; self-government in the broadest sense is the power which sustains colonies and instils into them life and independence. In the history of colonization, the Teutonic races represent the principle of self-government, which leads to the success of the immigrant, while the Latin nations represent that of state dependence and protection, which inevitably results in failure. Look at the Spanish republics, from Mexico down to Peru; at the French colonies, the youngest of which, Algiers, has ever since its first days been weak, and is almost dying from the effects of government care; and at the efforts of the Belgian government to regulate the work of their colonists in Central

America by military discipline, and compare them with the flourishing, thriving, and prosperous condition of the English colonies in America and Australia. The difference in the results of the two systems is too striking to require any further demonstration. In this country we had both systems working side by side in New France and New England. French rule, which, with its great captains, brave warriors, and indefatigable priests, tried to seize upon and fetter a continent, is a memory of the past; but New England, the growth of which—to use the eloquent language of Francis Parkman—was the result of the aggregate efforts of a busy multitude, each in his narrow circle toiling for himself, to gather competence and wealth—New England influences the destinies of a whole continent, and is one of the civilizing factors of the world.

I have shown, in a book on German immigration to this State, the third German edition of which is just published by Mr. E. Steiger, of this city, how the Germans, who in the beginning of the last century were settled on the upper Hudson by the English government, were a motley set of shiftless adventurers and vagabonds so long as they depended on the colonial authorities; but these same men, when left to themselves as settlers in the Schoharie and Mohawk valleys, soon became brave and daring pioneers, well-to-do farmers, and good citizens, who formed a living barrier against the inroads of the French and Indians, and conquered the finest parts of our noble State for civilization.

Again, it was from no whim of the immigrant that he avoided the Southern States while they were cursed with slavery; for a land can have no civil liberty in which freedom of labor and the dignity wherewith respectable employment is invested do not exist. In natural advantages, the Northwest is much inferior to the northern States of the South. Middle and South Virginia, for instance, are gardens of Eden, which cannot be excelled by any State of the Union, and yet they are partly in a primeval state. Henceforth the North and Europe will send their peaceably conquering armies of farmers and mechanics to take possession of these rich grounds, and raise them to the importance which they would have reached fifty years

ago, had it not been for the ban of slavery. So it will be in Tennessee, in Carolina, in Kentucky, and Texas. Foreign immigration, which, before the late war, almost exclusively settled in the free North, will henceforth pour into the South as well. The United States, by the successful termination of the war against rebellion, have indeed increased the attraction of this country for the immigrant, and there is not the least reason to doubt that the great Republic will in the future become more than ever the favorite land of the immigrant.

III.—WHAT IS THE CAPITAL VALUE OF IMMIGRATION TO THIS COUNTRY?

It is a common mistake of statisticians and writers on political economy to limit their enquiries to the amount of means which immigrants bring with them, to ascertain the aggregate thereof, and to conclude that the few millions thus obtained are the only addition to the nation's wealth.

In 1856, the Commissioners of Emigration in New York examined every immigrant as to the amount of his means, and the average cash of each of the 142,342 new-comers of that year amounted to $68 08. The Commissioners afterward discontinued this examination, for the reason that in spite of all their endeavors they could not obtain correct answers on the part of the immigrants, who were suspicious of their motives.

"The main object," says Superintendent Kennedy, in his report of January 14, 1858, "for enquiring of passengers the amount of cash means they possessed, was secured, when it was shown to the public that on the average they were in possession of a larger amount of such means than is held by the localized residents of any known community; and that, although a part of the immigration is among that class of persons who seek refuge on our shores, and subsistence by labor, with little or no cash means, yet a large portion bring with them of that kind of property a sufficient quantity to sustain themselves, and to aid in the enrichment of the country. It was justly apprehended that a continuance of the investigation might lead to mischievous results, from the manifest inaccuracy of the re-

sults. For while the table of 1856 presents the average amount of cash means at $68 08 per head, subsequent but reliable information showed that the concealment of large amounts had been constantly and successfully practised; and that, had full admission been made of the funds in possession, the average would have been at least double the amount reported."

I was myself at that time a witness of the unreliability of the statements of immigrants concerning their means. Being present when, in the summer of 1856, the passengers of a German ship were examined at Castle Garden, I observed an old farmer and his three adult sons, who, in answer to the enquiry of the superintendent, opened their pocket-books, counted the contents of each, and hesitatingly declared it to be about $25. I interposed, and explained to these people, who evidently apprehended that they would be taxed on account of their money, the reason of the interrogatories, whereupon the old farmer showed me a bill of exchange of $2,700 on a New York banker, and remarked that each of his sons had about the same amount with him. These men had been entered as having about $100 together, while in fact they ought to have been credited with about $11,000.

"German immigrants alone," says a report of the Commissioners of Emigration, December 15, 1854, on the subjects in dispute between the Commissioners of Emigration and the Almshouse Department of the City of New York, "have for the past three years, as estimated by the best German authorities, brought into the country annually an average of about eleven millions of dollars. A larger amount of money in proportion to numbers is estimated to have been brought from Holland and other countries. The amount of money thus introduced into the country is incalculable."

These estimates are corroborated by statements which I happened to find among some German statistical tables. It appears from the statistical records of the Grand Duchy of Baden, that from 1840 to 1849 the ready cash which each emigrant carried with him amounted to 245 florins, or $98 gold. Again, of the Bavarian emigrants between 1845–1851, each was possessed of 233 florins, or $93 20 gold; between 1851–

1857, each of 236 florins, or $94 40 gold; while the Brunswickers, who emigrated in 1853, had 136 thalers, or about $96 gold, each. The Würtembergers, in 1855, carried only $76 gold each with them; which sum in 1856 increased to $134 gold, in 1857 to $145 gold, and in 1858 even to $318 gold per head. Other official data concerning this I have not been able to obtain, but the instances just cited throw sufficient light on the subject.

The money, however, is not the only property which immigrants bring with them. In addition to it, they have a certain amount of wearing apparel, tools, watches, books, and jewelry. Assuming that their cash amounts to only $100 a head, I do not think I exaggerate in estimating their other property at $50, thus making $150 the total of the personal property of each immigrant. The total arrivals at New York for the year 1869 will be about 250,000 immigrants, and the amount added to the national wealth, through this port alone, in one year, will consequently not fall short of $37,500,000. Large as this sum appears, it is insignificant in comparison with the hundreds of millions which have been, and will be, produced yearly by the labor of immigrants. And here the question suggests itself: What is the economic value of each immigrant to the country of his adoption?

We are perfectly familiar with the estimates which, during the existence of slavery, were made of the value of negroes. A good field-hand was considered to be worth $1,200 and over; a good cook was valued higher; and a seamstress or housekeeper was, in some cases, held at even $1,500–$2,000. In order to obtain a proper idea of the importance of immigration to the United States, we must endeavor to capitalize, so to speak, the addition to the natural and intellectual resources of the country represented by each immigrant.

A prominent German statistician, Dr. Engel, of Berlin, Director of the Prussian Statistical Bureau, in an able treatise on the price of labor, distinguishes three periods in the economic life of each man; two unproductive and one productive periods. The first comprises the raising and education of the individual, and continues until he reaches his fifteenth year. It is of

course not only unproductive, but causes considerable outlay. The second, extending from the fifteenth to the sixty-fifth year, is the productive time of life. The third comprises the unproductive years of old age after sixty. Dr. Engel calls the first the juvenile, the second the labor, and the third the aged period.

It is only during this productive period that man is able to subsist on the results of his own labor. In the juvenile period he is dependent on the assistance of others, and in the aged period he has to live upon the accumulated fruits of the productive years. Whether or not the child in its first period lives at the expense of his parents, there must be means for its maintenance and education, and as nature does not spontaneously furnish these means, and as they cannot be provided by others without danger of impoverishment if not replaced, they must be obtained by labor. This labor is performed during the productive period, in which the following three objects should be attained, viz.: 1. The payment of the expenses incurred for the support and education of the child in the juvenile period; 2. The satisfaction of the daily wants and the maintenance of the productive power of the individual; 3. The laying up of a surplus fund for his sustenance during the aged period. Thus the cost of the bringing up and education of a man constitutes a specific value, which benefits that country which the adult individual makes the field of his physical and intellectual exertions. This value is represented by the outlay which is necessary to produce an ordinary laborer. An immigrant, therefore, is worth just as much to this country as it costs to produce a native-born laborer of the same average ability.

It is evident that the capital value which a grown-up able-bodied immigrant represents is different according to his station in life and the civilization of the country whence he comes. The wants of a skilled and unskilled laborer from the same country differ widely. Those of the Englishman are different from those of the Irishman. The German must be measured by another standard than the Mexican or South American. Their mode of life, their economical habits and

practical pursuits, have little in common; and hence the benefit to the country of their adoption varies according to their respective previous relations. It is certain, however, that each immigrant brings, independently of his personal property, a certain increase of wealth to this country, which increase is paid by the country from which he comes, and accordingly must be credited to it.

In order to arrive at the most accurate possible estimate of this addition of wealth, it is necessary to enquire into the cost of raising and educating, in this country, a man whose means of living are wholly derived from his physical labor. I shall not include in the following calculation the professional man, the scholar, the lawyer, the clergyman, the physician, the engineer, and others, who, in the course of years, have likewise come here by thousands, and added to our productive wealth in proportion to the greater cost of their education; but I shall confine myself to the class named, which forms the great majority of immigrants.

Dr. Engel computes the cost of raising a manual laborer in Germany at 40 thalers a year for the first five years of his life; at 50 thalers for the next five years; and at 60 thalers from the eleventh to the fifteenth year, thus arriving at an average of 50 thalers per year, or 750 thalers in all. From my knowledge of German life I consider this estimate as correct as it can be; and assuming that in this country subsistence costs about twice as much as in Germany, I do not think I shall be far from the truth in doubling Engel's estimates, and in assuming the expense of bringing up an American farmer or unskilled laborer for the first fifteen years of his life to average 100 thalers per year, or a total of 1,500 thalers, equal to about $1,500 currency. Following Dr. Engel's estimate, an American girl will be found to cost only about half of that, or $750, for the reason that she becomes useful to the household from an earlier age. Allowance must be made, it is true, for the fact that about one-fifth of the immigrants are less than fifteen years old; but this is fully balanced by the great preponderance of men over women, and by the thousands who represent the highest order of skilled labor. Hence I feel safe

in assuming the capital value of each male and female immigrant to be $1,500 and $750 respectively for every person of either sex, making an average for both of $1,125. My friend, Mr. Charles Reemelin, one of the most prominent American political economists, confirmed these figures, in a very able address, made before the German Pioneer Association of Cincinnati, on May 26, 1869, in which he estimated the value of each immigrant who had come to that city to live at $1,500, and the total value of the fifty thousand immigrants who have taken up their residence there in the last forty years at seventy-five millions of dollars.

The number of immigrants who have arrived at the port of New York from May 5, 1847, to January 1, 1869, is no less than 4,038,991. Adding to the capital value of $1,125 represented by every immigrant, $150 per head for the average value of personal property brought, as I have shown, by each, we find that immigration increased the national wealth, in the stated period, by more than five billions of dollars, or more than twice as much as the present amount of the national debt. The total immigration into the United States being now at the rate of 300,000 souls per year, the country gains nearly four hundred millions of dollars annually, or more than one million per day!

IV.—HOW DOES IMMIGRATION AFFECT THE POPULATION AND WEALTH OF THIS COUNTRY?

Under this head we have to consider not only the increase of population by the immigrants proper, but also that produced by their descendants. It is the great merit of Mr. L. Schade, of Washington City, to have first applied the proper principle in computing the gain of population in this country from immigration. As he has shown, if it had been the policy of the Government to exclude all aliens from our shores, the growth of the population of the United States would represent simply the excess of births over deaths. In 1790 the population of the United States, exclusive of slaves, was 3,231,930. In the census returns for 1850 we find that among the white and free colored population the number of births was 548,835, and the

number of deaths 271,890. The excess of the former over the latter—276,945—represented the increase of population for 1850. The whole population of whites and free colored persons in 1850 was 19,987,573. This increase, therefore, was at the rate of 1·38 per cent. I cannot find in the small edition of the Census for 1860 the number of births; but in 1860 the percentage of increase is nearly, if not precisely, the same as in 1850—the total increase of population from 1840 to 1850 being 35·87, and from 1850 to 1860 35·59 per cent.

That this estimate of 1·38 as the yearly rate of increase of the population without immigration cannot possibly be an under-statement appears evident when we compare it with the percentage of the yearly increase of the population of other countries. In England the rate was only 1·25; in France, 0·44; in Russia, 0·74; and in Prussia, 1·27. This increase of 1·38 added each year to the aggregate of the preceding year down to 1865 would give us the population of the United States as it would have been if the policy of excluding immigration had been followed. The whole white and free colored population in the year 1790 having been 3,231,930, it would have amounted, if increased only by the excess of births over deaths,

In 1800 to	3,706,674,	while in fact it was,	exclusive of	slaves,	4,412,896
" 1810 "	4,251,143	"	"	"	6,048,450
" 1820 "	4,875,600	"	"	"	8,100,056
" 1830 "	5,591,775	"	"	"	10,796,077
" 1840 "	6,413,161	"	"	"	14,582,008
" 1850 "	7,355,423	"	"	"	19,987,563
" 1860 "	8,435,882	"	"	"	27,489,662
" 1865 "	9,034,245	"	"	"	about 30,000,000

Deducting 9,034,245 from 30,000,000, the remainder, or 20,965,755, represents the population of foreign extraction gained by the United States since 1790. If the influx of aliens had been stopped in that year, the population in 1865 would have been very nearly what it was in 1825. Immigration, therefore, has enabled this country to anticipate its natural growth some forty years. The increase of wealth in every branch of

national activity has been, too, in the exact ratio of the increase of population. Official statistics show, indeed, that the augmentation of imports, exports, tonnage, and revenues has been most rapid during the periods of the largest immigration. The following tables give ample proof of this fact:

Year.	Imports.	VALUE OF Exports.	Tonnage.	Revenues.
1800	$91,252,768	$70,971,780	972,492	$12,451,184
1810	85,400,000	66,757,974	1,424,783	12,144,206
1820	74,450,000	69,691,699	1,280,166	20,881,493
1830	70,876,920	73,819,508	1,191,776	24,844,116
1840	131,571,950	104,805,891	2,180,764	25,032,193
1850	178,136,318	151,898,720	3,535,454	47,649,388
1860	362,168,941	400,122,293	5,353,868	76,752,034

The number of immigrants between		1819–1829	128,502
"	"	" 1829–1839	538,381
"	"	" 1839–1849	1,427,337
"	"	" 1849–Dec. 31, 1860 .	2,968,194
Total in 41¼ years			5,062,414

V.—IS IMMIGRATION A MATTER OF STATE OR OF NATIONAL CONCERN?

We hear it often said that immigration is to the country, not to a State; that it has a national bearing; and that in more than one respect we stand in absolute need of a national board of emigration. I do not agree with this. Immigration is undoubtedly a matter of national importance, but it is a matter of State concern also. I will endeavor to state the grounds on which this opinion rests.

Ever since immigration has attained greater proportions, legal questions have grown out of the financial interests connected with it, which have turned on the point whether a single State has or has not the right to tax the immigrant on his arrival for sanitary purposes and for his protection. As this tax, or commutation money, of $2 50 which is levied on each immigrant landing at New York amounts to between one-

half and three-quarters of a million per year, it will easily be understood that the magnitude of the amount involved induced a reference of the questions to the highest tribunals of the land. In the majority of cases it has been decided that a State has a right to impose such a tax, and that under the Constitution the General Government has no power to interfere or act in the matter. Lately this same question has again been taken up by Western newspapers, and by some Western members of Congress. They demand that the commutation money which immigrants pay at the several ports of entry be distributed, *pro rata*, among the States where they settle; and to effect this purpose they insist that the United States Government should take the whole business of immigration in its own hands; that the Secretary of the Treasury make all needful rules and regulations, and appoint the proper officers in the same manner in which the Custom House officers are appointed; thus doing away entirely with all State institutions which have been established in the course of years for the protection of immigrants. I believe not only that existing laws authorize the single State to exercise an exclusive control over immigrants, but that the real interest of the country requires this exclusive State control to be continued.

It is, of course, known to all of you that New York is the principal port of entry for immigrants, and that more than five-sevenths of them are landed there. Whether directly pointed out or not, it is the port and State of New York against which the attacks of those who wish to give to the General Government the exclusive power of dealing with immigration are directed. Now, the State of New York is, as far as my knowledge extends, the only one which has organized a proper system for the protection of immigrants. It took years to effect a wholesome reform in the former management of immigration. It would fill volumes to narrate the one-hundredth part of the sufferings immigrants had to undergo. They were commonly treated with the least possible attention, with the utmost disregard of decency and humanity. With rare exceptions they were robbed and plundered from the day of their departure to the moment of their arrival at their new homes, by almost every one with whom they came in contact. They were treated

worse than beasts, and less cared for than slaves, who, whatever their condition may be in other respects, represent a smaller or larger amount of capital, and as valuable chattels receive from their owners some help and protection. There seemed to be a secret league, a tacit conspiracy, on the part of all parties dealing with immigrants to fleece and pluck them without mercy, and hand them from hand to hand as long as anything could be made out of them. The poor foreigners were virtually helpless against any sort of imposition and fraud. The thousands who died from ill-treatment on the voyage were thrown into the ocean with as little ceremony as old sacks or broken tools. If crosses and tombstones could be erected on the water as on the Western deserts, where they indicate the resting-places of white men killed by savages or by the elements, the routes of the emigrant vessels from Europe to America would long since have assumed the appearance of crowded cemeteries. At last, when the abuse and the plundering of immigrants became too great and notorious, the community began to understand that it had to suffer as much, if not more, than the immigrants themselves, if the latter were not protected from the rapacity of principals and the frauds of agents. Both humanity and sound policy dictated the necessity for a thorough change of the old system, and a strong desire manifested itself among all political parties to reform the existing laws. The problem to be solved was to protect the new-comer; to prevent him from being robbed; to facilitate his passage through the city to the interior; to aid him with good advice, and, in cases of urgent necessity, with a small amount of money; but withal not to treat him as a pauper and prospective inmate of the almshouse, but as an independent individual upon whose future career the best interests of the country to a certain extent depend.

This problem was solved by the creation of the Board of the Commissioners of Emigration of the State of New York, on May 5, 1847, since which time that body has worked most efficiently for the benefit of immigrants. The Commissioners, who serve gratuitously, are not the guardians of the latter, nor

do they distribute charities among them, but they are the trustees of the emigrant fund, which is derived from the commutation of $2 50 per head before adverted to, and upon which every immigrant has a right to fall back. To the board he is not a pauper, but a person legally entitled to protection by virtue of the payment of the head money. Last year the receipts of the Commissioners amounted to a little more than $670,000. They hold now in trust a property on Ward's Island of the value of at least two millions of dollars, and are perfectly able to meet all the expenses and disbursements connected with the effectual care and support of the immigrant. To give you an idea of the extent of their labors, and the interests committed to their care, I will mention that last year the landing depot at Castle Garden, including rent, repairs, and salaries, involved an outlay of over $120,000; that there were paid to the hospitals, and cities, and counties of the State, for the nursing and support of immigrants, a little over $100,000, and that the cost of maintaining 11,513 inmates of the hospitals and asylums on Ward's Island was $230,000.

Having the honor of being a member of the Board of the Commissioners, I refrain from any statement concerning their individual efforts; but, looking back on the history of the Commission during the last twenty-three years, I do not hesitate to say that, on the whole, they have well carried out the trust confided to them, and that the country as well as the immigrants can congratulate themselves that the latter on their arrival find the necessary protection, good advice, and, in case of need, sufficient pecuniary and other aid. It is true that only 5 to 10 per cent. of the whole number of immigrants apply directly to the Commissioners for aid; but, on the other hand, the advantages enjoyed by all who pass through are so great that the commutation of $2 50 per head appears as a very insignificant consideration. The landing of immigrants and their baggage, free of charge, from on board the vessel to the railroad depot or on board the steamer, costs ordinarily more than $2 50; while the protection against fraud and imposition, the facilities for procuring passage tickets and changing money, and the correct weighing of bag-

gage, cannot be estimated in dollars and cents. Again, every immigrant who remains in the State is, during the first five years after his arrival, entitled to gratuitous treatment in the hospitals on Ward's Island. He is also taken care of there when destitute. During the last three winters the inmates of Ward's Island numbered more than 2,500 persons of all nationalities.

All that I can admit in regard to the question of State or national control is, that the Congress of the United States has not only the right, but is absolutely bound, in the interests of humanity, to protect the immigrant on the high seas, in his transit from foreign countries, and to make for that purpose international treaties, which Congress alone can do. But the authority of the Federal legislative power extends no further in the premises, and completely ceases after the immigrant has landed and put himself under the operation and protection of the State laws. For Congress to attempt, then, to collect from him any tax, or to assume his support, would be not less absurd than if it were to undertake to license the boarding-house where he puts up, to appoint the policeman who protects him, or to provide him with transportation to his railway depot. The care of the immigrant, after he lands, is purely a police regulation, in which the people of the State where he lands are so exclusively interested as to have, beyond a doubt, the best right to provide for him. The harbor of the City of New York, while of national importance, is still of State concern, and so it is with foreign immigration.

But granting, for the sake of argument, that immigration is a matter of national concern, it is doubtful if anything but evil would result from abandoning a system which has fully realized its purpose—which has been tried and perfected by the experience of nearly a quarter of a century; whose operations are greatly facilitated by being concentrated upon a comparatively small area, and the agents under which are few, practised, and under the immediate supervision of a Board of unsalaried and non-partisan Commissioners, located and laboring on the spot. To replace such a system by the clumsy machinery of a central board, or by a single commissioner, sta-

tioned at an inland city, remote from the chief objective points of foreign immigration, with an unwieldy multitude of subordinates scattered over the land, whose irresponsibility would inevitably increase in the direct ratio of their distance from the seat of authority, would be worse than unreasonable. The transfer to the National Government of the control of the immigrant would lead to quarrels, heart-burnings, and jealousies among the States, as the controlling officers would certainly be required to use their power to influence the current of immigration. The effect would undoubtedly be to so increase the cost of supporting the immigrant, as either to quadruple the present tax, and then make it virtually a prohibitory one, or to impose the burden on the national treasury, and thus make the immigrant the nation's pauper.

It is obvious that the General Government would encounter a great many more insurmountable obstacles and be called upon to remedy more evils than are met with under the present system. In the first instance, the institutions for the protection of the immigrant would have to be largely extended, and instead of one place like Castle Garden, a dozen would be required. Besides the Eastern and Southern and Western ports, the large inland cities, like Cincinnati, Chicago, St. Louis, Milwaukee, and St. Paul, would have to be provided with the same proportionate facilities as New York. Thus the General Government would be obliged to sustain ten establishments, while the income derived from the commutation would remain the same. At a very low estimate, the Government would have to pay at least one million of dollars per year out of its coffers for this purpose. In itself, this sum is insignificant when expended for such an object; but every cent spent from the national treasury for the immigrant can only injure his condition and the proper appreciation of his value. Again, we all know the tendency of originally small public expenditures to grow into large ones. While one million might suffice at first, many millions would be required in the end. One of the worst consequences would be that immigration would speedily become a political question, and as such the subject of strife among demagogues, and that cry against the "importation of foreign

paupers" would doubtless soon be raised by which the condition of the immigrants would be deeply affected. Again, it is not clear to me how the United States can establish hospitals and houses of refuge for the small percentage of sick and destitute among immigrants, unless the fundamental law of the country is changed. This difficulty would, in all probability, lead to a division of the duties for the protection of the immigrant between the General and State governments, so that the several States would be charged with the duty of nursing the sick and supporting the destitute. Whether they would or could do this, is a matter about which I have considerable doubt.

There is another weighty objection to a transfer of the control of immigration to the General Government. The proper care of the immigrant requires a staff of efficient officers, having well-trained employés acting under them. Experience has shown that even the best organized minds require months and years to master this task.

The best and most efficient agents of the Commissioners of Emigration have served under them from May 5, 1847, that is, from the birth of the Commission. They have educated themselves and others to a proper comprehension and discharge of their duties. They are familiar with all the minutiæ of the service, and are consequently able to perform their work more speedily and efficiently than inexperienced new-comers. The uniformity and stability of the system, the undisturbed march of progress and reform, the absence of sudden changes, from an indisposition to try new experiments, constitute, indeed, the main reasons of the success of the New York Commission of Emigration, which would never have been attained if, with the advent of every national administration, a change of officers and clerks had taken place.

It is a well-known fact that the mode in which the General Government appoints its officers is very far from giving security for the proper discharge of their duties. We have seen about ten or twelve different collectors of the New York Custom House since 1847, and in all probability each new administration would have paid off part of its political liabilities by ap-

pointments to offices in connection with immigration. The place of general agent or treasurer of the Commission would have been eagerly sought after, as the salary connected therewith is larger than that of any one subaltern of the Collector of Customs in New York. The interest of the ruling party would have been paramount, of course, to the interest of the immigrant. And how many clerks and assistants rotated into office would withstand the temptations held out in the immigration business, which would be greater than in any other branch of the civil service? When, according to the statement of a Commissioner of Internal Revenue, it costs one hundred millions in bribes, theft, and embezzlement to collect three hundred millions of revenue, I do not think I exaggerate when I state that the immigrant, if handed over to the mercy of the regular office-holder, would not leave New York without having been fleeced out of at least one half of his property. Certainly, so long as Mr. Jenckes's Civil Service bill, or some such measure, has not become the law of the land, it will be a cruelty and an aggravation of the existing evils to make the change referred to.

New York City is the main gateway through which the vast tide of immigration enters, and New York State the great thoroughfare over which it pours to be diffused over the Union. While New York has to endure nearly all of its evils, the other States reap most of the benefits of immigration. New York protects and shields the immigrant in his health and property, and the rising communities of the West flourish upon the fruits of her vigilant care. Our State acts, so to speak, as a filter in which the stream of immigration is purified: what is good passes beyond; what is evil, for the most part, remains behind. Experience shows that it is the hardy, self-reliant, industrious, wealthy immigrant who takes his capital, his intelligence, and his labor to enrich the Western or Southern States. As near as a calculation can be made, it has been ascertained that out of one hundred continental immigrants seventy-five go West, and twenty-five remain in the great cities of the East, while of the Irish and English, twenty-five settle in the country, and seventy-five remain in the cities

of the East. Thus about fifty per cent. of all new-comers go to the country, and of these again about seventy-five per cent. to what is now called the West. In 1867, of 242,731 immigrants, only 91,610 declared New York State and City to be the place of their destination; and in 1868, out of 213,686, only 65,734 proposed to remain in our city and State.

A large proportion of those who remain here is made up of the idle, the sickly, the destitute, the worthless, who would become a burden instead of a help to our people, were it not for the wise institution of that fund which, at the least possible cost to the immigrant, yet still at a cost that relieves him from the degradation of eleemosynary aid, provides him with shelter and support. It is this feature of our State emigrant laws which is so admirable, and which, at the same time, for reasons already indicated, it would be most difficult for the General Government to imitate.

The same trifling sum which the immigrant pays to secure himself against the danger of possible sickness or destitution for five years after his arrival, and which is, as it were, the insignificant premium on a policy of health insurance for that time, supports the establishment which takes care of him without burden to the people of the State. It is this feature which invalidates the Western claim for division of the commutation money *pro rata* among the States in which the immigrant settles. For the commutation fund is the consideration of a contract between the immigrant and the State of New York, by which the latter binds herself to protect him on his arrival, and for the period of five years thereafter provide him with shelter if destitute, and with medical and other aid if sick.

Contrary to the arguments of those who favor the distribution of the commutation money among the several States to which immigrants go to settle, it is susceptible of proof that such a distribution would eventually result in injury rather than in benefit to the States in question. For, in that event, the share of New York would not be sufficient to meet the expense of caring for the disproportionately large number of sick and destitute who remain within her limits. Our State could

not then, as she does now, act in the interest of the whole Union, by efficiently protecting all the immigrants on their arrival, and by preventing the spread of the diseases imported by them over the country at large, and this while deriving far less advantage from immigration than the Western States. Let those who compare the exaction of the commutation money by the Commissioners of Emigration of this State to the "Sound dues" formerly levied by Denmark, consider whether it would not be a far greater disadvantage for the Western States to have ship-fever, cholera, and other pestilential diseases carried among their people, than it is for them to do without the share of the commutation money which they claim. In 1846–47, more than twenty thousand immigrants died on the sea-voyage and immediately after landing, and thousands of others carried the germs of disease to the remotest corner of the land. It is the Commissioners of Emigration who have since prevented the spread of contagious diseases beyond their hospitals, and the East as well as the West ought to thank them for their disinterested care of the immigrants, and for the protection of the whole country from pestilential scourges.

It seems to me that those who wish to put an end to this beneficent work estimate the value of the immigrant by dollars and cents instead of by his productive power, and forget entirely that what the West wants is healthy men, capable of assisting actively in the development of her resources. This want is certainly better supplied under the present system than it would be were a change made. The same persons also seem to overlook entirely the beneficial influence exercised upon the immigrant by the protection against fraud and imposition of every kind afforded to him by the Commissioners. It is in this that benevolence and sympathy find their true sphere of action. The pecuniary losses of the immigrant from his own ignorance and inexperience, and from the rapacity of others, are to be deplored as much, and even more, on account of the community than on his own account. For, whenever the poor immigrant is fleeced by rogues, his judgment is impaired, his energy is diminished, and in general that moral elasticity lost which he needs more than ever to start well in a strange

land; and thus a heavy injury is inflicted on his adopted country, which, instead of self-relying, independent men, receives individuals who are broken in spirit, and, at least for a time, useless, who are burdensome to themselves and to others. From this point of view, every one who has the interest of his fellow-being and of his country at heart has the strongest interest in having the immigrant efficiently protected, and in co-operating with those who are officially called upon to provide for this protection.

If the same people who engage our attention on their landing here crossed our path in their native country while in their old accustomed track of life, the task would be comparatively easy, for in that case they would much more readily understand their interest and advantage; they would not be confused by a hundred new impressions; and the majority of them would distinguish the honest man from the scoundrel. Upon emigrating, however, the masses enter into entirely new relations, into a new world; two-thirds of them do not know the language of the country, and all receive in one single hour more new notions and ideas than formerly in years. Thus, they find themselves without proper guidance, and fall the easier into the hands of impudent impostors, perhaps for the very reason that they have been warned against them. This sudden transition from one country into another, this change of old homelike surroundings, with new conditions of life, all of which are strange and some offensive to the immigrants, often stuns them temporarily, and creates a general bewilderment, which makes even an intelligent man appear awkward and stupid. If you should think this statement exaggerated, please imagine yourselves in a foreign country, to the language, customs, and habits of which you are strangers.

My long experience in immigrant matters has, I am free to say, led me to the conclusion that whatever you may do, you cannot absolutely protect the immigrant against the practices of sharpers as long as you cannot obstruct the sources from which credulity and ignorance flow. You can take some precautionary measures, you can point out the right way, but it is just as impossible entirely to cure the evil as it is to

put an end to human depravity in general. The Commissioners cannot be expected to accomplish an impossibility. In New York a special detective would have to be assigned to each immigrant in order to render him absolutely secure against all attempts to swindle him. What a board like that of the Commissioners can do is to give the immigrant the best possible protection, and this duty they are certainly discharging.

In conclusion, I beg to say that, if Congress should wish to legislate for the benefit of immigration, there is just at this moment a large field, where good can be accomplished without trenching on the Constitution by changing the present system. I refer to the international protection of the emigrant. We have international treaties in the interest of commerce and industry, and for the protection of all kinds of property. Why should not the boon of international legislation be extended to so important an economic interest as immigration? It is the tendency of the age to humanize legislation and to extend the protection of international law to other than purely commercial objects. In the face of the cruelties which are almost daily committed on helpless immigrants by greedy shippers and railroad companies, and their agents, it is high time that emigration be placed under the shield of international law, and that these poor people, so long abused and ill-treated with impunity, finally cease to be considered as legitimate objects of prey. It is to the great credit of the North German Confederation that it was first to propose to our Government a treaty for this purpose, which is liberal, wise, and in the interest of all the parties concerned. It is the first time in the history of emigration that the government of the country which suffers so much by the loss of her sons acknowledges the principle of personal liberty as the basis of modern international intercourse, and generously charges itself with the care of the immigrants, even after they have left the land of their birth. This noble advance ought to meet with the hearty response at the hands of the law-making powers of that country which derives so many advantages from immigration. Constitutional doubts and scruples should not prevent the speedy conclusion of such a treaty. Where there is a will, there is a way.

I think I can conclude this paper no more fitly than in expressing the wish that our public may become fully aroused to the vital importance of this reform, and that Congress may meet the requirements of justice and humanity in the case of the immigrant.

FRIEDRICH KAPP.

THE AMERICAN CENSUS.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 27, 1869.

THE modern census is so closely related to the science of statistics, that no general discussion of it is possible, without considering the principles on which statistical science rests, and the objects which it proposes to reach.

The science of statistics is of recent date, and, like many of its sister sciences, owes its origin to the best and freest impulses of modern civilization. The enumerations of inhabitants and the appraisements of property made by some of the nations of antiquity were practical means employed sometimes to distribute political power, but more frequently to adjust the burdens of war; but no attempt was made among them to classify the facts obtained, so as to make them the basis of scientific induction. The thought of studying these facts, to ascertain the wants of society, had not then dawned on the human mind; and, of course, there was not a science of statistics in the modern sense.

It is never easy to fix the precise date of the birth of any science, but we may safely say that statistics did not enter its scientific phase before 1749, when it received from Prof. Achenwall, of Göttingen, not only its name, but the first comprehensive statement of its principles. Without pausing to trace the stages of its growth, some of the results of the cultivation of statistics in the spirit and methods of science may be stated as germane to this discussion.

1. It has developed the truth that society is an organism, whose elements and forces conform to laws as constant and pervasive as those which govern the material universe; and

that the study of these laws will enable man to ameliorate his condition, to emancipate himself from the cruel dominion of superstition, and from countless evils which were once thought beyond his control; and will make him the master, rather than the slave, of nature.

Mankind have been slow to believe that order reigns in the universe—that the world is a cosmos, and not a chaos.

The assertion of the reign of law has been stubbornly resisted at every step. The divinities of heathen superstition still linger, in one form or another, in the faith of the ignorant; and even many intelligent men shrink from the contemplation of one Supreme Will acting regularly, not fortuitously, through laws beautiful and simple, rather than through a fitful and capricious Providence.

Lecky tells us that in the early ages it was believed that the motion of the heavenly bodies, as well as atmospheric changes, was effected by angels. In the Talmud a special angel was assigned to every star and every element, and similar notions were general throughout the middle ages.

The scientific spirit has cast out the demons, and presented us with nature, clothed and in her right mind, and living under the reign of law. It has given us, for the sorceries of the alchemist, the beautiful laws of chemistry; for the dreams of the astrologer, the sublime truths of astronomy; for the wild visions of cosmogony, the monumental records of geology; for the anarchy of diabolism, the laws of God.

But more stubborn still has been the resistance against every attempt to assert the reign of law in the realm of society. In that struggle statistics has been the handmaid of science, and has poured a flood of light upon the dark questions of famine and pestilence, ignorance and crime, disease and death.

We no longer hope to predict the career and destiny of a human being by studying the conjunction of planets that presided at his birth. We study rather the laws of life within him, and the elements and forces of nature and society around him. We no longer attribute the untimely death of infants to the sin of Adam, but to bad nursing and ignorance. We are beginning to acknowledge that

"The fault, dear Brutus, is not in our stars,
But in ourselves that we are underlings."

Governments are only beginning to recognize these truths.

In 1853, the Presbytery of Edinburgh petitioned the British Ministry to appoint a day of national fasting and prayer, in order to stay the ravages of cholera in Scotland. Lord Palmerston, the Home Secretary, replied in a letter which, a century before, no British statesman would have dared to write. He told the clergy of Scotland that, "the plague being already upon them, activity was preferable to humiliation; that the causes of disease should be removed by improving the abodes of the poor, and cleansing them from those sources of contagion which would infallibly breed pestilence and be fruitful in death, in spite of all the prayers and fastings of a united but inactive nation." Henry Thomas Buckle expressed the belief that this letter will be quoted in future ages, as a striking illustration of the progress of enlightened public opinion. But that further progress is possible is seen in the fact that within the last three years an English bishop has attributed the rinderpest to the Oxford Essays and the writings of Colenso.

2. The developments of statistics are causing history to be rewritten. Till recently, the historian studied nations in the aggregate, and gave us only the story of princes, dynasties, sieges, and battles. Of the people themselves—the great social body with life, growth, forces, elements, and laws of its own—he told us nothing. Now, statistical enquiry leads him into the hovels, homes, workshops, mines, fields, prisons, hospitals, and all places where human nature displays its weakness and its strength.

In these explorations, he discovers the seeds of national growth and decay, and thus becomes the prophet of his generation.

Without the aid of statistics, that most masterly chapter of human history—the third of Macaulay's first volume—could never have been written.

3. Statistical science is indispensable to modern statesmanship. In legislation as in physical science, it is beginning to be understood that we can control terrestrial forces only by obeying their laws. The legislator must formulate in his statutes not only the national will, but also those great laws of social life revealed by statistics. He must study society rather than black-letter learning. He must learn the truth "that society usually prepares the crime, and the criminal is only the instrument that completes it;" that statesmanship consists rather in removing causes than in punishing or evading results.

Light is itself a great corrective. A thousand wrongs and abuses that grow in the darkness disappear like owls and bats before the light of day. For example, who can doubt that before many months the press of this country will burn down the whipping-posts of Delaware as effectually as the mirrors of Archimedes burned the Roman ships in the harbor of Syracuse?

I know of no writer who has exhibited the importance of this science to statesmanship so fully and so ably as Sir George Cornewall Lewis in his treatise "On the Methods of Observation and Reasoning on Politics." After showing that politics is now taking its place among the sciences, and, as a science, its superstructure rests on observed and classified facts, he says of the registration of political facts, which consists of history and statistics, that "it may be considered as the entrance and propylæa to politics. It furnishes the materials upon which the artificer operates; which he hews into shape and builds up into a symmetrical structure."

In a subsequent chapter he states the importance of statistics to the practical statesman in this strong and lucid language: "He can hardly take a single safe step without consulting them. Whether he be framing a plan of finance, or considering the operation of an existing tax, or following the variations of trade, or studying the public health, or examining the effects of a criminal law, his conclusions ought to be guided by statistical data." *

* Vol i., p. 134.

Napoleon, with that wonderful vision vouchsafed to genius, saw the importance of this science when he said: "Statistics is the budget of things; and without a budget there is no public safety."

We may not, perhaps, go as far as Goethe did, and declare that "figures govern the world," but we can fully agree with him that "they show how it is governed."

Baron Quetelet, of Belgium, one of the ripest scholars and profoundest students of statistical science, concludes his latest chapter of scientific results in these words:

"One of the principal results of civilization is to reduce more and more the limits within which the different elements of society fluctuate. The more intelligence increases, the more these limits are reduced, and the nearer we approach the beautiful and the good. The perfectibility of the human species results as a necessary consequence of all our researches. Physical defects and monstrosities are gradually disappearing; the frequency and severity of diseases are resisted more successfully by the progress of medical science; the moral qualities of man are proving themselves not less capable of improvement; and the more we advance, the less we shall have need to fear those great political convulsions and wars, and their attendant results, which are the scourges of mankind."

It should be added that the growing importance of statistical science, as well as its recent origin, is exhibited in the fact that nearly every modern nation has established, within the last half century, a bureau of general statistics for the uses of statesmanship and science. In the thirty states of Europe that are now assiduously cultivating the science, not one of their central bureaus was fully organized before the year 1800.

The chief instrument of American statistics is the census, which should accomplish a twofold object. It should serve the country by making a full and accurate exhibit of the elements of national life and strength; and it should serve the science of statistics by so exhibiting general results that they may be compared with similar data obtained by other nations.

In the light of its national uses, and its relations to Social Science, let us consider the origin and development of the American census.

During the colonial period, several enumerations of the inhabitants of the Colonies were made by order of the British Board of Trade; but no general concerted attempt was made to take a census until after the opening of the Revolutionary war. As illustrating the practical difficulty of census-taking at that time, a passage in a letter written in 1715, to the Lords of Trade, by Hunter, the Colonial Governor of New York, may be interesting: * "The superstition of this people is so unsurmountable that I believe I shall never be able to obtain a complete list of the number of inhabitants of this province." He then suggests a computation based upon returns of militia and of freemen; afterward the women and children, and then the servants and slaves.

William Burnet, Colonial Governor of New Jersey, to the Lords of Trade, June 26, 1726, after mentioning returns made in 1723, says: "I would have then ordered the like accounts to be taken in New Jersey, but I was advised that it might make the people uneasy, they being generally of a New-England extraction and thereby enthusiasts; and that they would take it for a repetition of the same sin that David committed in numbering the people, and might bring on the like judgments. This notion put me off from it at that time, but since your lordships desire it, I will give the orders to the sheriffs that it may be done as soon as may be."

That this sentiment has not yet wholly disappeared may be seen from the following: At a public meeting, held on the evening of November 12, 1867, in Washington City, pending the taking of the census of the District of Columbia by the Department of Education and the municipal authorities, a speaker, whose name is given in the reported proceedings, said: "I regard the whole matter as illegal. Taking the census is an important matter. In the Bible we are told David ordered Joab to take the census, when he had no authority to do so,

* New York Colonial MSS., vol. v., p. 459.

and Joab was punished for it. He thought these parties (the Metropolitan Police) should be enjoined from asking questions, and he advised those who had not returned the blank not to fill it up or answer a single question."

As early as 1775 the Continental Congress resolved that certain of the burdens of the war should be distributed among the Colonies "according to the number of inhabitants of all ages, including negroes and mulattoes, in each colony," and also recommended to the several colonial conventions, councils, or committees of safety to ascertain the number of inhabitants in each colony, and to make return to Congress as soon as possible. Such responses as were made to this recommendation were probably of no great value, and are almost wholly lost.

The Articles of Confederation, as reported by John Dickinson in July, 1776, provided for a triennial enumeration of the inhabitants of the States; such enumeration to be the basis of adjusting the "charges of war and all other expenses that should be incurred for the common defence or general welfare." The Eighth of the Articles as they were finally adopted provided that these charges and expenses should be defrayed out of a common treasury, to be supplied by the several States, in "proportion to the value of land within each State, granted to or surveyed for any person; and such land, and the buildings and improvements thereon, shall be estimated according to such mode as the United States in Congress assembled shall from time to time direct and appoint."

The Ninth Article gave Congress the authority "to agree upon the numbers of land forces, and to make requisitions from each of its quota in proportion to the number of white inhabitants in such State." These articles unquestionably contemplated a national census to include a valuation of land and an enumeration of population, but they led to no substantial results. When the blanks in the Revenue Report of 1783 were filled, the committee reported that they had been compelled to estimate the population of all the States except New Hampshire, Rhode Island, Connecticut, and Maryland.

The next step is to the Constitutional Convention of 1787. The Charter of Government framed by that body provided for a national census to be taken decennially. Moreau de Jonnès, a distinguished French writer on statistics, in his "Éléments de Statistique," refers to the constitutional provision in the following elevated language:

"The United States presents in its history a phenomenon which has no parallel. It is that of a people who instituted the statistics of their country on the very day when they formed their government, and who regulated, in the same instrument, the census of their citizens, their civil and political rights, and the destinies of the country."

De Jonnès considers the American census the more remarkable because it was instituted at so early a date by a people very jealous of their liberties; and he gives emphasis to his statement by referring to the heavy penalties imposed by the first law of Congress to carry these provisions into effect.

It must be confessed, however, that the American founders looked only to practical ends. A careful search through the "Madison Papers" has failed to show that any member of the Convention considered the census in its scientific bearings. But they gave us an instrument by which those ends can be reached. "They builded wiser than they knew."

In pursuance of the requirements of the Constitution, an act providing for an enumeration of the inhabitants of the United States was passed March 1, 1790.

As illustrating the growth of the American census, it is worth observing that the report of the first census was an octavo pamphlet of fifty-two pages, and that of 1800 a folio of seventy-eight pages.

On the 23d of January, 1800, a memorial of the American Philosophical Society, signed by Thomas Jefferson as its President, was laid before the Senate. In this remarkable paper, written in the spirit and interest of science, the memorialists prayed that the sphere of the census might be greatly extended; but it does not appear to have made any impression on the Senate, for no trace of it is found in the annals of Congress.

The results attained by the first six censuses were meagre for the purposes of science. That of 1790 embraced population only, its single schedule containing six enquiries. That of 1800 had only a population schedule with fourteen enquiries. In 1810, an attempt was made to superadd statistics of manufactures, but the results were of no value. In 1820, the statistics of manufactures were again worthless. In 1830, the attempt to take them was abandoned. In 1840, there were schedules of population and manufactures, and some enquiries relating to education and employments.

The law of May 23, 1850, under which the Seventh and Eighth Censuses were taken, marks an important era in the history of American statistics. This law owes many of its wisest provisions and the success of its execution to Mr. Joseph C. G. Kennedy, under whose intelligent superintendence the chief work of the last two censuses was done. This law marks the transition of the American census from the merely practical to the scientific phase. The system thus originated needs correction, to make it conform to the later results of statistical science and to the wants of the American people. Nevertheless, it deserved the high commendations passed upon it by some of the most eminent statisticians and publicists of the Old World.

While recognizing the great relative merits of the last census, it is also evident that the important advances made in social science, and the great changes that have occurred in our country during the last decade, require a revision of the law.

To this end I shall examine, first, some of the principal defects in the methods of the existing law, and, second, the defects in the enquiries made in its schedules.

I.—DEFECTS IN THE PRESENT METHOD OF TAKING THE UNITED STATES CENSUS.

1. The work of taking the census should no longer be committed to the charge of the United States marshals. These officers belong to the Judicial Department of the Government;

are not chosen with a view to their fitness for census-taking, or any statistical enquiry; and whether so qualified or not, the greatly increased duties devolved upon them by the revenue laws and other legislation, since the last census was taken, make it more difficult now than ever before for them to do this work, and do it well; and in the popular mind, they are so associated with arrests and seizures that their census visits will create uneasiness and suspicions.

The unequal size of territory embraced in their several districts leads to an unequal and unwise distribution of the duties of supervision, and this injuriously affects the uniformity, promptness, and efficiency of the work. One is charged with the supervision of all the census work in Massachusetts, with its million and a quarter of inhabitants; while another superintends a district embracing but one-half of Florida, and a population of 70,000; and another has but one-third of Alabama, and a population of 320,000.

There are sixty-two judicial districts and as many marshals. Thirty-three of the States and Territories compose each a single district. Ten States contain two districts each, and three are divided into three districts each.

This is not only an unequal distribution of duty, but the growth of the country has made many of the districts too large for any one man to perform thoroughly and promptly the work of supervision.

2. Too much time is allowed in taking the census and publishing its results.

The law of May 23, 1850, under which the Seventh and Eighth Censuses were taken, allows five months in which to make the enumeration, and make the returns to Washington, and authorizes the Secretary of the Interior to extend the time in certain cases. It contains no provision concerning the time of publication. As a consequence, the main report for 1850 was not printed till 1853, and the volume relating to manufactures was not printed till 1859. The preliminary report of 1860 was not printed till 1862; the full reports on population and agriculture were delayed till

1864; and those on manufactures and mortality till the end of 1866.

It has been strongly urged that the enumeration should be made in a single day; and the example of England is cited to show that it is practicable. The enquiries made in the British census are very few in number, and almost exclusively confined to facts of population. General statistics are not provided for in their census.

Again, the small extent of territory to be traversed and the density of the population make it possible to carry out a plan there which would prove a disastrous failure here, with our vast areas and sparse population.

The census is our only instrument of general statistics, and must be more elaborate than that of countries having permanent statistical bureaus; and, as our enumeration is not of the actual but the legal population, a longer time, say one month, can safely be allowed.

3. Another important matter (which affects, also, the question of time) is the present objectionable method of obtaining the population statistics. The census-taker calls on a family, and spreads before them his array of blanks, which they then see for the first time. Suspicions of his inquisitorial character must be allayed; fears that it is an assessment for purposes of taxation must be quieted; the subject must be explained; the memories of the family stimulated; and the data they furnish criticised and recorded.

A very capable gentleman, who was an assistant marshal in 1860, has estimated the average time required for each family, exclusive of travel, at thirty minutes. Thus, an honest day's work would accomplish the enumeration of not more than twenty families.

Far more important than the waste of time is the inaccuracy which must result from this method.

It is not reasonable to suppose that a family can, in half an hour, make anything like a complete and accurate statement of a great number of details to which they have not previously given any special attention.

4. The operations of the Census Office, under the present law, are not sufficiently confidential. The citizen is not adequately protected from the danger, or rather the apprehension, that his private affairs, the secrets of his family and his business, will be disclosed to his neighbors.

The facts given by the members of one family will be seen by all those whose record succeeds them on the same blank; and the undigested returns at the Central Office are not properly guarded against being made the quarry of book-makers and pamphleteers.

5. The rule of compensation is arbitrary, complicated, and of doubtful wisdom.

One rule is followed in paying the officers and employés at the Central Office; another for the marshals; and still another for the assistant marshals. One principle of compensation is adopted for enumerating the inhabitants; another for taking the statistics of industry; another for mileage; and still another for copying returns.

It has been charged, on what appear to be reasonable grounds, that these rules offer temptations to exaggerate some parts of the returns, and to make constructive charges, which swell the expenses to an unreasonable degree.

It should be added that the great change which has occurred in prices and wages since the passage of the law makes the rule inapplicable to the present condition of affairs.

To remedy these defects of method, the law should be so amended that the work shall be supervised and the enumeration made by persons chosen for their special fitness for such work, and in no way connected with the national constabulary or with the assessment or collection of taxes.

The districts should be much smaller than they now are—so small that one man may intelligently arrange the work, designate census-takers, of whose qualifications and fitness he may easily have full knowledge, and personally supervise and unify all the work within his jurisdiction.

The congressional district seems to be the most convenient and appropriate unit of classification for the States; and each

Territory may properly, as under the present law, constitute a district.

Separate schedules, at least for the household, the farm, and for manufacturing and commercial establishments, should be distributed a month or a fortnight before the day to which the enumeration relates, so that the people may be familiarized with the enquiries made, and that, as far as possible without the aid of the census-taker, the blanks may be filled up.

This will ensure greater correctness, and will greatly reduce the time required for the enumeration. By the use of these schedules, and an organization such as has been suggested, it is believed that the enumeration may actually be completed in one month from the first of June.

It should be put into the law, and into the official oath of all officers and employés of the bureau, that the returns are confidential; that the business of no citizen shall be made public; that the returns of money values shall not, in any way, be made the basis of taxation, nor be used as evidence in the courts.

These provisions of the law should be printed on the schedules; and the President should be requested to issue his proclamation calling upon all the people to aid in making the returns as full and accurate as possible.

A liberal compensation, in the simple form of salary or per diem, with no mileage or constructive charges, should be provided, so as to command and ensure the best talent of the nation for the execution of the work. Small pay in this matter would be wastefulness.

A sufficient clerical force should be employed at Washington to tabulate, condense, and arrange the whole for publication in one year, or, at the farthest, two years, after the returns are in.

The results can be published in a form considerably more condensed than in the last report.

II.—DEFECTS IN THE ENQUIRIES PRESCRIBED IN THE SCHEDULES OF THE PRESENT LAW.

I. *Statistics of Population and Industry.*—As numbered in the census of 1860, the first three schedules relate to statistics of population and mortality. One of them, the second, had

exclusive reference to slaves. We are now happily one people, and need but one schedule of population.

All the enquiries retained from the three may be entered on the family schedule already suggested, and, by dropping the nine enquiries of the slave schedule, other important ones may be added without increasing the aggregate number.

Probably none of the enquiries of the first and third schedules can be dispensed with; but several should be modified. That relating to color should be made to include distinctively the Chinese; and perhaps a modification should be made so as to note separately those negroes who were made free by the war or during its progress.

The value of the enquiry in regard to persons attending school would be greatly enhanced by requiring the enumerator to enter, under that head, the grade of the school, whether a common school, academy, college, or professional school. This can be done without increasing the number of columns. The registration of those who cannot read and write is required only in cases of persons twenty years of age and upward. This class should be extended, at least to persons fifteen years old. It is more important to know how many illiterate persons there are between the ages of fifteen and twenty than at any later period; for between ten and twenty it is usually determined whether an education is gained or lost.

In the last column of the first schedule are recorded the deaf, dumb, blind, insane, idiotic, paupers, and convicts. The last two classes ought not to be entered on the household schedule. Families are naturally reluctant to give such statistics; and they can be much more accurately and easily obtained at the infirmaries and prisons.

In place of these classes, others should be added, to exhibit more fully the physical force of the country. The war has left us so many mutilated men, that a record should be made of those who have lost a limb or have been otherwise disabled; and something more than is now required might safely be added, to show the state of public health and the prevalence of some of the principal diseases. Dr. Jarvis, of Massachusetts, one of the highest living authorities on vital statistics, in a

masterly paper presented to the Census Committee, urged the importance of measuring, as accurately as possible, the effective physical strength of the people.

It is not generally known how large a proportion of each nation is wholly or partially unfitted, by physical disability, for self-support. The statistics of France show that in 1851, in a population of less than 36,000,000, the deaf, dumb, blind, deformed, idiotic, and those otherwise mutilated or disabled, amounted to almost 2,000,000. We thus see that in a country of the highest civilization, the effective strength of its population is reduced one-eighteenth by physical defects. What general would venture to conduct a campaign without ascertaining the physical qualities of his soldiers, as well as the number on his rolls? In the great industrial battle which this nation is now fighting, we ought to take every available means to ascertain the effective strength of the country. Besides the enquiries in these schedules that should be amended, a few new ones should be added.

Since the present census law was passed, an International Statistical Society has been organized; and the profoundest scholars of Europe and America have united to give it authority and efficiency in the treatment of social questions. At several of its sessions the subject of national censuses has been very ably and elaborately discussed; and recommendations have been made looking to greater efficiency and uniformity both in methods and enquiries. A collation and comparison of the personal statistics of twenty-seven modern states and nations show that in all these states there have been thirty-three different enquiries made in regard to population. From these the International Congress selected eight, which they recommended to all nations as indispensable for purposes of general statistical science; and seven others, which they urged the use of, whenever it was practicable. Two of the enquiries, urged by the Congress as indispensable, are not in our schedule of population, and should be added. One is the relation of each person to the head of the family—whether wife, son, daughter, boarder, servant, etc.; and the other is the civil or conjugal condition of each person—whether single, married,

widowed, or divorced. These elements are the leading factors which determine the power and value of the family as a social and producing force; and in them are infolded the destiny of the nation.

Two other enquiries, not in our schedules, were suggested as advisable, viz., the language spoken, and the religion professed by each person. But in a nation whose speech is so nearly one, the first is hardly needed in addition to the light that will be thrown upon this question by the record of nationality; and the second might be deemed an uncalled-for impertinence.

It has been strongly urged, and with good reason, that to the enquiry of the birthplace there should be added the birthplaces of the father and mother of each person. This would enable us to ascertain the relative fecundity of our American and foreign-born populations. It has lately been asserted that the old ratio of increase among our native population is rapidly diminishing. If this be true, the vitally important fact should be ascertained, and its full extent and significance determined.

I venture to suggest that an enquiry ought to be made in regard to dwelling-houses, so as to exhibit the several principal materials of construction, as wood, brick, stone, etc., and the present value of each. Few things indicate more fully the condition of a people than the houses they occupy. The average home is not an imperfect picture of the wealth, comfort, refinement, and civilization of the average citizen. The census ought to show us how comfortable a place is the average American home, and how great a physical and social force is the average American citizen.

I shall conclude the discussion of personal statistics with one further statement.

The Thirteenth and Fourteenth Amendments of the National Constitution have radically changed the basis of representation, and provided for a redistribution of political power. By the former, two-fifths of those who were lately slaves are added to the representative population. By the latter, the basis for each State is to be determined by finding the whole number of male citizens, 21 years of age, whose right to vote is denied or

abridged for any other reason than participation in the rebellion or other crime, and reducing the whole population in the proportion which the number thus excluded bears to the whole number of adult male inhabitants.

The census is our only constitutional means of determining the political or representative population. The Fourteenth Amendment has made that work a difficult one. At the time of its adoption, it was generally understood that the exclusion applied only to colored people who should be denied the ballot by the laws of their State. But the language of the article excludes all who are denied the ballot on any and all grounds other than the two specified. This has made it necessary to ascertain what are, in fact, the grounds of such exclusion, and the Census Committee have compiled a record from the constitutions and laws of the several States, from which *exclusion from the privilege of voting (otherwise than on account of rebellion or other crime) may be stated in nine general classes as follows:*

1. On account of race or color,	16	States.
2. On account of residence on lands of United States,	2	"
On account of residence less than required time in United States,	2	"
On account of residence in State less than required time (6 different specifications),	36	"
On account of residence in county, city, town, district, etc. (18 different specifications),	37	"
3. Wanting property qualifications, or non-payment of taxes (8 specifications),	8	"
4. Wanting literary qualifications (2 specifications),	2	"
5. On account of character or behavior (2 specifications,)	2	"
6. On account of services in army or navy,	2	"
7. On account of pauperism, idiocy, and insanity (7 specifications),	24	"
8. Requiring certain oaths as preliminary to voting (2 specifications),	5	"
9. Other causes of exclusion (2 specifications),	2	"

After much reflection, I can see no better way than to add to the family schedule a column for recording those who are voters, and another with this heading, copied substantially from the amendment: "*Citizens of the United States being twenty-one years of age, whose right to vote is denied or abridged on other grounds than rebellion or crime.*" It may be objected that this will allow the citizen to be a judge of the law as well as the fact; and that it will be difficult to get true and accurate answers. I can only say this is the best method that has been suggested.

Dr. Jarvis presented to the Committee an able argument in favor of taking the actual, as well as the legal, population of the country. While I acknowledge the scientific value of such an enumeration, yet it is evident that to take it with sufficient accuracy, the enumeration must be made in so short a time as to endanger the fulness and accuracy of answers in the other schedules, and the two results thus obtained would greatly complicate and increase the difficulty of determining the representative population.

II. *Statistics of Agriculture.*—While I am not at liberty to speak for the Census Committee of the House of Representatives, nor to say that they have fully settled all the details of any of the schedules, it may not be improper to say that they have very carefully considered the farm schedule, and have prepared what seem to me very valuable modifications and additions. The length to which this paper has already grown makes it impossible for me to do much more than to state the proposed changes. They comprise:

1. An enquiry to show by what tenure the occupier holds his farm; whether as owner or tenant.

2. An extension of the present classification of lands as "Improved and Unimproved," so as to exhibit separately the acres of arable lands, cultivated and not cultivated; and the acres of woodlands and of uncultivated pasture.

3. An enquiry into the value of farm buildings other than dwelling-houses.

4. An enquiry into the total value of all labor expended on the farm during the year.

5. An enquiry into the average number of cows milked during the year.

6. A separate exhibit of the cheese made on the farm and that made at factories.

7. Instead of the present exhibit of the aggregate value of all slaughtered animals, a separate statement of the value of slaughtered cattle, hogs, and sheep.

8. A statement of the value of all the poultry on the farm, and the value of its product during the year.

9. In addition to the statistics of wine produced, a statement of the value of grapes sold which were not made into wine.

10. An omission from the schedule of "Water-rotted Hemp." It is not thus treated in this country, as in 1850 was supposed it would be.

11. An omission also of the silk culture, which has not fulfilled the promise of the days of Morus Multicaulis.

12. A statement, as regards all the principal crops, of the acreage as well as the amount of product. The importance of this last element cannot be overestimated. Without it, we cannot learn the yield of the several products in different localities, and the increase or decrease of that yield at different periods. It is well known, for example, that the centre of the wheat product has been rapidly moving west, but its track and rapidity of movement cannot be traced without knowing both the acres sown and the bushels produced.

It is believed that the schedule, amended as above suggested, would enable us to ascertain the elements of those wonderful forces which have made our country the granary of the civilized world; would exhibit also the defects in our agricultural methods, and stimulate our farmers to adopt those means which have doubled the agricultural products of England since the days of the Stuarts, and have more than doubled the comforts of her people. The extent of that great progress can be seen in such facts as these: that "in the reign of Henry VII. fresh meat was never eaten even by the gentlemen attendant on a great earl, except during the short interval between Mid-

summer and Michaelmas," because no adequate means were known of fattening cattle in the winter, or even of preventing the death of one-fifth of their whole number each year; that Catharine, Queen of Charles II., sent to Flanders for her salad, which the wretched gardening of England did not sufficiently provide.

Russia alone of European states makes any considerable surplus contribution to the food of the world. The United States must continue to be the main source of supply.

III. *Statistics of Industry.*—This schedule, the fifth of the series, has performed exceedingly valuable service to the country and to statistical science. It is said to be the first of its kind ever successfully used in any national census. But it can be greatly improved in several particulars.

1st. There are two serious defects in the heading of the first column, which reads as follows: "Name of Corporation, Company, or Individual producing articles to the annual value of $500."

The first defect is in the word "articles," which has been construed to mean merchantable articles, or such products of manufacture as can be done up in packages and sold over the counter as merchandise. A large proportion of all the products of industry cannot thus be handled. The carpenter, mason, plasterer, plumber, painter, builder of ships, cars, bridges, etc., all perform most valuable labor, and their products are homes, buildings, and structures of all kinds, a most important part of the fixed capital of the nation; but these cannot be called "articles," in the restricted sense in which the word is employed in the schedule. A plumber in Washington has lately finished a single job amounting to $20,000, but he has produced no "article" which would be entered in the schedule. A job of general repairs, however extensive, would not be entered. This defect should be remedied by requiring, in addition to the value of articles produced, an exhibit of the value of jobbing and repairing done within the year.

The second defect in this heading is the limitation of $500. He must be a very small manufacturer whose annual product,

including materials, is not more than $500. A shoemaker, who should make but two pairs of boots per week, would show a product of more than that amount. And yet it is manifest from the returns themselves that the products of the great majority of artisans were not enumerated in 1860. For example, the Eighth Census showed, in its list of occupations, 242,958 carpenters; while under the Industrial Schedule the value of the products of only 9,006 carpenters was reported!

The proper remedy is to make *establishments* the unit of enumeration. Wherever there is a manufactory or shop in operation, its occupants should be required to give the facts called for in the schedule. This would include the product of all manufacturers and artisans except those at work as journeymen; and in almost every instance the latter and their work would be included under the head of laborers employed in the establishment. It is believed that these changes will greatly increase the completeness and value of the results obtained.

In noticing the defects of this heading I am strongly reminded of the statement of Moreau de Jonnès, that two monosyllables in the instructions, added by a subordinate in the statistical bureau, destroyed the whole value of the French Census of 1836.

2d. The enquiry in reference to motive power should be so modified as to give the specific kinds—as steam, water, or horse, and the total power reckoned in horse power. It is a matter of growing importance to know how the labor of society is being distributed; to ascertain what part is performed by the muscle of man, and what by the use of machinery.

3d. To secure this more fully, a statement of the kind and number of machines, such as looms, spinning-jennies, etc., should be added.

4th. In reference to labor and wages, it would be useful to state separately the number of persons laboring in an industrial establishment who are owners or partners, and the number of those who work for wages.

5th. An important class of products, belonging to what the Italian Government has appropriately called "Extractive In-

dustry," has hitherto been wholly neglected in the census, and should be provided for. I refer to the products of our mines and fisheries, and to petroleum. No further proof of the propriety of this addition is needed than the fact that last year our coal mines must have yielded 30,000,000 tons, our iron mines 4,000,000 tons, and from our oil wells were exported over 100,000,000 gallons of petroleum, in addition to vast consumption at home. The Schedule of Industrial Statistics, with the amendments proposed, can be used for petroleum and the products of mines, but a special schedule will be needed for fisheries.

IV. *Statistics of Internal Commerce.*—In the preliminary law of March 3, 1849, the Census Board were directed to prepare a Schedule of Trade and Commerce, but no such schedule appeared in the law of 1850. It has been the habit to treat the exchangers of wealth—the middle-men who transport, and buy and sell—as belonging to the unproductive class. But an enlightened political economy will recognize all as producers of wealth who give value to commodities by bringing them within easy reach of the consumer and aid in facilitating exchanges. According to the Census of 1860, there were in the United States 13,340,000 men and women above nineteen years of age; and there were 227,177 persons set down in the list of occupations as persons engaged in trade, or one in 58 of the adult population of the country. There can be no adequate defence for omitting this large and intelligent class of the community from the records of national industry.

1. A simple and comprehensive schedule for all persons engaged in trade has been laid before the Census Committee, by Gen. Francis A. Walker, of the Treasury Department, and should be made a part of the next census law. It follows the general plan of the Industrial Schedule in regard to labor and wages, and requires, in addition, a statement of the amount of capital invested in trade, and the gross annual amount of purchases and sales.

2. Without adding to the duties of the enumerators, the law should require the central office at Washington to procure full

statistics of railroad, lake, river, and canal transportation, exhibiting, among other facts, the number of persons employed, the amount of freight and cost of transportation. Such enquiries are now made in Ohio, in regard to railroads, by authority of the Legislature, and the results are exceedingly valuable.

V. *Social Statistics.*—I mention this topic, which, in a rather crude and miscellaneous method of classification, forms the subject-matter of the sixth and last schedule of the law, for the purpose of saying that I shall wholly omit its discussion here; partly because the limits of this paper will not admit of its full examination, but chiefly because I desired, before reaching final conclusions, to hear the distinguished gentlemen who have discussed, and are yet to discuss, at this meeting, several questions directly bearing on that theme. To prepare proper enquiries in regard to education and religion, libraries, newspapers, and periodicals, so as to ascertain the amounts of money permanently invested in them and annually expended upon them, to make a proper exhibit of our institutions of charity and correction, and to lay the foundation for a fuller knowledge of the recent great movements in relation to the insurance of life and property, require all the wisdom of the best and most thoughtful men in the nation. While it is true, as Sidney Smith said of the House of Commons, that Congress knows more than any man in it, it is much more strikingly true that the country knows vastly more than Congress, and, in this matter of the census at least, the country should give Congress all possible aid.

It must be borne in mind, that if our national statistics are to be taken with completeness, we must lay more stress on the census than do the states of Europe. They have bureaus of statistics, permanently established, and under the direction of experienced statisticians; with us, such a bureau is still a desideratum. The great advantages attending such an establishment are thus forcibly stated by Dr. E. M. Snow, the eminent statistician, of Rhode Island, in a letter written to the Census Committee:

"I sincerely hope that in the statute organizing the census of 1870 provision will be made for the establishment of a per-

manent census bureau, or, better still (notwithstanding one failure), a permanent statistical bureau. The reasons for this are perfectly conclusive to all who are acquainted with the collection and compilation of statistics. The greatest defects in all our censuses have been owing to the want of knowledge and of experience in those employed upon them. We are almost destitute of men in this country, except in three or four States, who are familiar with the practical duties required in taking a census. The whole country needs educating on this subject. A permanent bureau, with an efficient head, would soon organize a corps of men in each State who would be familiar with the information to be obtained and with the best methods of obtaining it.

"On the score of economy, also, a permanent bureau would be the cheapest. With a corps of clerks educated in the best methods of doing their duties, and with trained men to obtain the information, and by making use of local officers and other sources of information in different States, I am perfectly confident that a permanent census bureau could obtain all the information now obtained by a decennial census, except that relating to population, and could obtain it *every year*, with no greater expense than is now required to obtain it once in ten years. The efficiency and economy, in statistical matters, of men familiar with their duties are greater beyond comparison than of men who are ignorant of these duties.

"A permanent national bureau of statistics is also very much needed to systematize the whole subject, to give information to all portions of the country, and to take the lead in the organization of similar bureaus in the several States. When such bureaus become general in all the States, the National Government will be able, with their assistance, to obtain all the statistics now obtained by the national census, and much more, far more frequently, far more correctly, and with much less expense."

We have, already, a Commissioner of Mining Statistics; some provisions in the Treasury Department for Financial Statistics; a department whose chief function is to collect Educational Statistics; and some attention is given to statistics in the

Department of Agriculture. It is greatly to be regretted that these statistical forces have not been consolidated, the scope of their work enlarged, and the whole thoroughly organized; all of which could be done at an expense not greatly increased. But at this late day, it is manifestly impossible to organize and equip a permanent Statistical Bureau in time to take the next census, and hence, regret it as we may, we must again depend wholly on the Census Office.

In conclusion: the American census should furnish a muster-roll of the American people, showing, as far as it is possible for figures to show, their vital, physical, intellectual, and moral power; it should provide us with an inventory of the nation's wealth, and show us how it is invested; it should exhibit the relation of population to wealth, by showing the distribution of the one and the avocations and industries of the other.

The Ninth Census of the United States will be far more interesting and important than any of its eight predecessors. Since 1850, in spite of its losses, the nation has doubtless greatly increased in population and in wealth; it has taken a new position among the nations. It has passed through one of the most bloody and exhaustive wars of history. The time for reviewing its condition is most opportune. Questions of the profoundest interest demand answers. Has the loss of nearly half a million young and middle-aged men, who fell on the field of battle, or died in hospitals or prisons, diminished the ratio of increase of population? Have the relative numbers of the sexes been sensibly changed? Has the relative number of orphans and widows perceptibly increased? Has the war affected the distribution of wealth, or changed the character of our industries? And, if so, in what manner and to what extent? What have been the effects of the struggle on the educational, benevolent, and religious institutions of the country? These questions, and many more of the most absorbing interest, the Census of 1870 should answer. If it do not, the failure will reflect deep disgrace on the American name.

JAMES A. GARFIELD.

THE MODE OF PROCEDURE IN CASES OF CONTESTED ELECTIONS.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 26, 1869.

THE Constitution of the United States has made each House of Congress "the judge of the elections, returns, and qualifications of its own members." There is no review or appeal, and no tribunal that can prescribe rules that shall govern its action or that can correct its errors. In all things involving the mode of procedure and the final judgment, each House is for and over itself supreme. And this supreme authority rests in the House for the time being—a House of Representatives, whose term is limited to two years, and a Senate, of which one-third changes in the same time. It follows, therefore, not only that there can be no law prescribing a binding mode of procedure in contested elections, but no probability of uniformity of proceeding in such cases as they arise. Regulated by no law and bound by no precedent, each House takes up the investigation of each case, at full liberty to pursue it in the way then deemed most expedient or just, and conscious as it proceeds that all its decisions, interlocutory as well as final, are absolutely within its own control. It is at every step a law unto itself.

This is a most remarkable power, and has no analogy; not remarkable in that it is supreme, for in every constitutional government there is a tribunal of last resort existing somewhere, and of course supreme over the subject-matter or the person falling within its jurisdiction. But in all such tribunals, not only the jurisdiction but the constituent parts of the body itself are defined and fixed by a law outside of, and superior to, the tribunal itself. It does not pass upon its own commission. Yet, in a contested election in Congress, the subject-

matter and the person falling within the supreme jurisdiction of each House are the constituents of its own body. Of whom the body shall consist, the body itself has absolute power to determine. And the power to determine of whom either House shall consist includes that of determining the political character of that House, and the fate of measures and of administrations, and, it may be, of the Government itself. The grave character of this power thus becomes apparent the moment it is comprehended.

It may be enquired why the framers of the Government, so jealous of all power, should, in a Constitution remarkable for its checks and balances, have entrusted any department or branch with unlimited power over any subject-matter; much less over one so essential and vital as its own constituent elements and character. But the answer is, that it was a necessity. The power must be lodged somewhere, and it would be the same wherever it rested. No other department exists, so constituted in reference either to its other functions or its relations to other departments, that it could properly discharge also this most delicate and important duty. And to have erected a court outside and independent, not only of both Houses, but of the present Court and the Executive, to sit in judgment, without interference or appeal, upon "the elections, returns, and qualifications" of the members of both branches of the legislature, would have been the creation of a strange and unheard-of and most dangerous element, more powerful and prone to destroy than to preserve. If it were elective, like the two Houses themselves, it would be exposed to every influence and partake of every weakness which, in this regard, can be imputed to them, and would be, in all respects, essentially the same. If it were appointed, like the Judiciary, then it would be absolute, as well in its independence of accountability as in its functions, and could dictate to all other departments. The power reposes where it does, not from accident, for nothing in that great charter came of chance, but from the deliberate and far-reaching statesmanship which stamps the whole instrument. And although much has been done under it which cannot be defended, yet more has partaken of the highest judicial charac-

ter. The marvel is, that, when we look at the passions which so often sway both branches of our national legislature and the influences to which they are constantly open, so little mischief has been done, and no greater violence to the law and the evidence has marked the action of either of these bodies, when passing judgment upon the election, returns, or qualifications of any of its own members.

In the Senate, there never has been any attempt to establish a code of procedure; but each case, as it has arisen, has been taken up and investigated in the manner which, for the time being, seemed most convenient and best calculated to elucidate the points upon which it hinged. The reference, formerly to a Select Committee, has been of late to the Judiciary Committee of that body, generally composed of the ablest lawyers of the Senate; and their reports have elicited discussions of very grave and important legal questions. From the mode of elections to that body by the legislatures of the respective States, very few questions of fact can arise, and they must lie within a very narrow compass. The right of a member of a State Legislature to cast a vote for senator can never be called in question in a contest before the Senate, because each State Legislature, like the national, is made the exclusive judge of the elections, returns, and qualifications of its own members. Thus a wide and difficult field of investigation, open in the other House, is here closed at the outset. The few cases of contest in that body have turned not so much on questions of fact as of law, and have been discussed and determined often with an ability and impartiality that would have graced the highest court of judicature in the land.

In the House of Representatives, the procedure has been widely different, from the commencement of the Government, and has been in constant change and conflict with itself. At the first session of the First Congress, a standing Committee of Elections was appointed, and, upon the reference to them of the first case of contested election, they were instructed "to prepare a proper mode of investigation and decision thereon." They recommended that the committee take the proofs and

report them to the House, and that the House should decide what had been established by the proofs thus taken, without any previous opinion reported by a committee. The House agreed to this report, and thereby made the committee, in this instance, simply a clerk to write out and report such evidence as might be offered. But when the evidence was submitted to the House, there was a struggle to recommit it, with instructions to report "the *facts* arising from the proofs;" but this failed, and the House itself examined the evidence and settled the case without the further aid of a committee. In the next case which arose in the same House, the committee were *required* to report the facts which appeared to them to be established, after having heard all "proofs and allegations from persons who may be desirous to appear and be heard." But no further direction appears to have been given, and the committee were at liberty to hear such "proofs and allegations" upon oath and *viva voce*, by deposition, on notice to the opposite party, on affidavit merely, or in argument alone. But on the coming in of their report an attempt to obtain a commission to take testimony in New Jersey, where the election occurred, failed, as did also an effort to introduce counsel to be heard at the bar of the House. At the first session of the Second Congress, on reference of a petition, the committee reported for that case, and the House adopted still another mode of proceeding, prescribing that proofs should be taken under oath before some judge of the United States or of the State where the contest arose, upon due notice to, and cross-examination by, the opposite party, and confined to the allegations set out in the petition; all of which should be returned to and acted upon by the House itself, without the previous hearing by a committee or any report thereon. In this, and one other case at least, counsel were heard in behalf of the parties at the bar of the House. At the very next session of Congress still another and fourth method was adopted. A petition was referred, with instructions to the committee "to examine the matter thereof, and report the same, with their opinion thereon, to the House." This committee took the whole matter of proofs into their own hands, and, with con-

sent of parties, prescribed the mode of taking testimony, and its return to the committee themselves to be by them considered. They subsequently reported *facts*, and their conclusions based upon the testimony, which it does not appear was ever laid before the House for its consideration. Both parties were then heard at the bar of the House, and then retired from the hall, when, after further discussion in the House, the report was adopted. At this session the committee were for the first time "authorized to send for persons, papers, and records for their information." And in the next Congress they were also "authorized to direct the taking of depositions in any cases where it may be impracticable or inconvenient for the witnesses to give their personal attendance, and to prescribe the mode."

It thus appears that in the early Congresses contested elections were conducted by no particular mode of proceeding, and seldom in conformity to any of the rules and forms found by experience in ordinary courts best calculated to develop facts and secure justice. This evil was felt by those who participated in these investigations, and efforts were made from time to time to establish by law something approximating to such a code of procedure as would secure both a speedy and thorough examination and a just determination of the questions involved in contested elections in Congress.

The importance of these questions was early seen, and it did not escape notice that an element of partisan power was destined ere long to be developed in that ultimate revision of election returns which the Constitution itself had placed in the control of each House of Congress. As early as 1791, and again in 1796 and the following year, resolutions were introduced into the House seeking to prescribe the mode in which testimony should be taken; but they were never acted upon. In December, 1797, a series of resolutions, introduced by Mr. Harper, of South Carolina, embodying "a method of taking evidence to be adduced in the trial of contested elections," and looking to its enactment into law, arrested the attention of the House, and gave rise to a very able debate, disclosing for the first time the inherent constitutional difficulty, already alluded to, of establishing by law any method, when

each succeeding House of Representatives could dispense with any part, or the whole of it, at pleasure. But, nevertheless, on the 28th of January, 1798, a law was passed "prescribing a uniform mode of taking testimony, and for compelling the attendance of witnesses." But it was limited by its terms to the expiration of the first session of the next Congress, though, by a subsequent act, it was continued in force four years longer, finally expiring in 1804. Two subsequent attempts to revive and make it permanent failed, the one in the House, and the other in the Senate; and from 1804 to 1850 there was no law upon the subject. During that period there was no uniformity in the conduct of election cases, either in the mode of preparing the proofs, in conducting the hearing, or in the principles controlling the result. Proofs were prepared generally in accordance with usage in the States whence the contest arose, securing very little beyond diversity and conflict. In some cases affidavits, taken without cross-examination or notice, were used, and in all the testimony was only voluntary, there being no process to enforce the attendance of witnesses or compel them to answer. Against this loose and unsatisfactory procedure there was a constant struggle. In 1810 a bill to provide a remedy was introduced into the House, but it again failed; and in 1813 a resolution providing for the appointment of the Committee of Elections by lot, and another for a special committee to "examine the decisions of the House already made on the subject of contested elections, and report the rules, points, and principles which appear to them to have been thereby settled or adjusted," met a similar fate. Perhaps it was thought that the latter task was beyond the power of any one committee. The motion was renewed again in 1830 with no better success. Indeed, till 1834, no one could learn what had been done in contested elections without a search through the journals of all the Congresses to that time. A digest or compilation of cases was in that year published, serving as a valuable index, and this, in 1865, was brought down to that date, and much improved.

During all this time partisan zeal was entering more and more into every contest before the House, and the law and

the evidence were made to bend more and more to the necessities or advantages of majorities. At the assembling of the Twenty-sixth Congress, in December, 1839, the organization of the House itself, and, consequently, its control for the entire Congress, turned upon a contested election—the celebrated New Jersey case. The House was in a state of anarchy for two weeks, while contending claimants, pushed on by their partisans, were struggling to perform the duties of a representative in advance of the determination of their right to the office itself. The proceedings became well-nigh revolutionary. The House had no law but its own will to govern it, even in its organization, much less to determine the rights of ten men disputing over five seats and votes in effecting that organization. That the crisis passed, and the Government moved on to encounter and triumph over other and greater trials, was not by the aid, but in spite of existing methods of dealing with contested elections, which increased rather than diminished the complication and peril.

In 1851 another attempt was made to reduce to system and to law the mode of procedure in contested elections, and an act was passed, entitled "An Act to prescribe the mode of obtaining evidence in cases of contested elections," which is still in force. Its main provisions require the contestant, within thirty days after the result of any election to be contested is declared, to serve upon the holder of the certificate of election a notice of contest, containing specific allegations of the ground of contest. This must be replied to in like manner within the next thirty days, making, within the first sixty days after any declared result, and much earlier if the parties desire it, a distinct and well-defined issue for trial. The testimony in support of this issue on the one side and the other must be taken by deposition within the next sixty days before certain judges and other officers named in the act. All the testimony thus taken is to be sealed up by the magistrate, and forthwith forwarded to the Clerk of the House of Representatives, where it takes the usual reference to the Committee of Elections, who report the facts established by it, and their conclusions and recommendations, to the House for final action.

As far as this act goes it is an excellent one, and, with some few amendments of which experience has shown the necessity, and a rigid adherence to its requirements, would work much good. By it is gained preparation in advance. In the States where the election of representatives is held as early as November preceding the commencement of the term—and this will soon be the case in all the States—this statute secures the entire proofs in advance of the meeting of Congress, ready for reference on the first day of the term. Under it all the definiteness of an issue at law may be secured by the parties, and each will know beforehand what is charged and what denied. Every witness may be met and cross-examined before a high judicial officer, who is to have the custody of the testimony till it is deposited with the Clerk of the House. It is then printed as a part of the public records. The law is defective in this, that it does not provide for the compulsory attendance of witnesses, or any means for enforcing their testimony when in attendance; nor for reaching them when residing out of the district where the contest arises; nor for initiating and conducting the contest when the holder of the certificate is absent, or cannot for any reason be reached with personal service. It stops, too, with the preparation of the proofs, and makes no provision for the further conduct of the cause. Beyond this point there never has been any attempt to regulate by law the mode of determining an election case in either branch of Congress.

But the paralyzing weakness of this and of all other laws upon this subject is the constitutional inability to enforce them, already alluded to. The House of Representatives, for the time being, may set it aside at its pleasure, in whole or in part, as to one contest or as to all. This was understood by its framers; and all that they hoped to accomplish by it was to so demonstrate its utility that it would be adhered to as a wise rule, and in the strength of years and of usage it would gradually acquire the sanction and force of law. For a time after its enactment it governed all cases as law, sometimes with apparent hardship to individuals, and the idea that it could be dispensed with was slow in getting a foothold. But, in a few

instances at first, and more generally of late, in the troubled times through which the nation has passed, this, with other usages and modes of procedure, has given way to convenience and necessity, and sometimes to party requirements. The Committee of Elections, feeling more sensibly than others the necessity of a uniform rule, at first resisted all attempts to break it down; and whenever compelled to yield, sought to put upon the record some controlling reason for the departure. But convenience alone has come at last to be deemed a sufficient reason for disregarding it, and it is considered hardly worth while to put even this excuse upon the record. The Committee of Elections, the last to disobey it, has lately obtained leave of the House, in disregard of all its requirements, to go out itself into some of the districts where the contests exist, and there—forgetting that they should be judges only—do the work which this law requires to be done in advance by the parties themselves, and laid before them for judgment.

The consequences of this loose and undefined method are not slow to manifest themselves. All traces of a judicial character in these proceedings are fast fading away, and the precedents are losing all sanction. Each case is coming to be a mere partisan struggle. At the dictate of party majorities the committee must fight, not follow, the law and the evidence; and he will best meet the expectations of his appointment who can put upon the record the best reasons for the course thus pursued. This tendency is so manifest to those in a situation to observe, that it has ceased to be questioned, and is now but little resisted. There is no tyranny like that of majorities, and efforts in the past to resist them, and to hold the judgments of the Committee of Elections up above the dirty pool of party politics, have encountered such bitter and unsparing denunciation, and such rebuke for treason to party fealty, that they are not likely often to be repeated. The fruit that follows such seed is too certain for doubt. The whole proceeding must sink into contempt. Self-respect, as well as legal attainment, will soon retire from service upon a committee required, in the name of law and under the cloak of judicial sanction, to do the work of partisans. But the work itself is sure to

return to plague the inventors. What one party does through such machinery can be done all the easier for it by any other which may come after it. And that which needs such support will soon become worthy of no other.

When political ends are to be gained through the forms of a contested election, there will be no lack of material or disposition; and nothing more certainly attests the prostitution of this tribunal, or is more justly calculated to awaken apprehension, than the astonishing increase of the number of contests within the last few years. While the record discloses but sixty cases during the first sixty-five years of the Government, there have been more than that number within the last ten years. And it is understood that over twenty cases are pending at this time in the present Congress. Another fact disclosed by this record finds no other explanation than is here given. Those with the minority in Congress seldom contest. A belief that the court is packed with a ruling majority, and has *its* work to do, tells plainly enough upon the number and political affiliations of contestants, vastly increasing their number from the one side, and in like manner diminishing the list from the other. What was said by Mr. Granville, on introducing into the British Parliament the bill for regulating contested elections, which has since borne his name, is to-day as true of contests in the House of Representatives as it then was of those in the House of Commons: "Instead of trusting to the merits of their respective causes, the principal dependence of both parties is upon their private interest among us; and it is scandalously notorious that we are as earnestly canvassed to attend in favor of the opposite sides as if we were wholly self-elective, and not bound to act by the principles of justice, but by the discretionary impulse of our own inclinations. Nay, it is well known that in every contested election many members of this House, who are ultimately to judge in a kind of judicial capacity between the competitors, enlist themselves as parties in the contention, and take upon themselves the partial management of the very business upon which they should determine with the strictest impartiality."

A few words upon the possible remedy for existing and

prospective evils will close this paper. From the partisan character of the Committee of Elections, which is, in our practice, substantially the court which tries the case and furnishes the reasons or the cover for the final vote in the House, flows much of the mischief here considered. And that partisan character comes of the manner of its appointment. This committee is appointed by the Speaker, under the same usage which governs the selection of all the other committees, and which amounts to a law with him, that it shall consist of a majority from the political party having the control of the House, and as nearly as possible with the same relative strength of parties that exists in the House itself. It becomes at once a political committee, and from the hour of its appointment is infected with an incurable disease.

Contrast this mode of constituting the court with the pains taken in the British Parliament to secure an impartial tribunal. Under the Granville Act already spoken of, on a given day, all the members were required to be in attendance, and the names of those present were placed in six glasses, as nearly equally divided as possible, and forty-nine names in all were drawn alternately from each glass, from which a committee of thirteen were selected, for a particular case only, by the parties, contestant and sitting member, alternately striking one name from the list, until it was reduced to that number. They were sworn before leaving their seats, with as much formality as a jury, to "well and truly try the matter of the petition, and a true judgment give according to the evidence." They must meet within twenty-four hours, and complete the hearing and judgment without an adjournment longer than twenty-four hours, unless by leave of the House. And no member of the committee could absent himself from its meetings without such leave. The findings of this committee were final upon the parties and the House. It was found in practice that, upon the day of the draft of the committee, one party or the other would, by previous canvassing, procure the attendance of his friends in greater number than his opponent, and consequently the lot would fall more frequently with them than with the other side,

and a partial committee would thus be obtained. Therefore, under Statute 11 and 12 Vict. chap. 98, now in force, the Speaker appoints a General Committee of Elections, and submits the names to the House for their approval, and this committee selects a committee to try each case; and their names are likewise submitted to the House, and may be objected to by the parties or any member for causes specified in the act. This committee, thus challenged, are sworn, and try the case in the manner already described, and their judgment is likewise final and binding upon the parties and the House. By the Constitution of Pennsylvania, it is also provided that the Committee of Elections shall be drawn by lot, and that their judgment shall be final.

I am aware that the Constitution of the United States, so long as it gives each House, for the time being, the control of the question, stands in the way of any permanent regulation by statute, and that a thorough reform cannot stop short of such an amendment of that instrument as will permit the regulation by law of the mode of procedure, while it leaves each House, as now, to be the judge of the elections, returns, and qualifications of its own members. And until that is done, for the reasons already stated, no radical reform can be effected. Some improvement, however, can be brought about by a change in the mode of appointing the Committee of Elections, and much more by such a public sentiment as will put an end to the exactions of party at their hands. Let the political committee be buried in the same grave with the political judge.

There is need that public attention should be aroused to the necessity of reform. The subject awakens no public interest, and will fail to reach the public ear till fatal consequences are upon us.

A discussion in the House seldom finds listeners beyond the parties directly involved, and members content themselves with being present at the roll-call, and never forgetting to record their names according to the requirements of party affiliation. This is called a judgment of the House upon the

"elections, returns, and qualifications of its own members." I have shown, instead, that it is becoming an engine of political parties working out their ends, and involving the institutions of the country in their purposes and fate.

HENRY L. DAWES.

THE PUBLIC CHARITIES OF THE STATE OF NEW YORK.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 26, 1869.

THE object of this paper is to give a general account of the "Public Charities" of the State of New York.

A preliminary explanation of the meaning of the term "charities" should be made.

The legal signification of the word is broad and comprehensive. It includes all organized effort by an individual donor or the public, through the appropriation of money, to promote objects of general utility. In this sense it would embrace moneys appropriated to public streets and highways, to the advancement of religion and education, as well as to those objects which are more popularly deemed to be charitable. A narrower sense is intended in this paper. It is the devotion on the part of the State of New York of funds to the aid of the dependent classes in society, to the care of paupers, habitual drunkards, the insane, the blind, the dumb, and vicious and neglected children.

A very large class of charities must pass wholly unnoticed. There are, in all parts of the State, and particularly in the cities, endowments made by public-spirited individuals for public uses, under the care of select trustees or corporations. Such institutions as the Cooper Institute, the Astor Library, and the Sailor's Snug Harbor on Staten Island are here referred to. These are wholly passed over in this paper, not from any want of sense of their importance, but because the State does not contribute to their resources or exercise any superintendence over them. I have to deal solely with those charities which are either wholly or partially sustained by the State, and have recently been subjected to general superintendence. I shall seek to learn what the State is doing, and what safe-

guard it provides for the due appropriation of its moneys. I am studying an administrative question. If the State appropriates, it should carefully and thoroughly superintend expenditure and make it most efficient. I am treating the charity question as I would that of appropriation to canals, observing where more should be expended, and how the sums employed may be made to accomplish the largest results.

A word should be said in this connection as to the Board of State Charities. In the year 1867 a law was passed providing for the appointment by the Governor and Senate of a Board of Commissioners of Charities, consisting of eight persons, to be selected from different parts of the State. These persons receive no pecuniary compensation for their services other than actual travelling expenses. A secretary is appointed by them under a moderate salary, who devotes his entire time to the work. All charitable institutions receiving pecuniary aid from the State are placed under the supervision of the Board. I shall, in the course of this paper, indicate some of the results arrived at by the Board during the first year of its active existence, and which have just been submitted to the public. The materials for its conclusions were largely collected by the diligent efforts of its active and zealous secretary, Dr. Charles S. Hoyt. It fell to the lot of the writer of this paper to prepare the report of the Board itself. If any similarity should be detected between the results arrived at this evening and those which the Commissioners have presented, it will thus be accounted for.

I shall undertake in a few brief sentences to sketch the demands upon the charity of the State and the institutions which it has established. I shall then indicate such errors of administration as occur to me, and make such suggestions as give promise for the future.

The State has, as nearly as can be estimated, the care of four thousand three hundred and fifty-six insane persons; of five hundred blind, five hundred and fifty deaf-mutes, one thousand five hundred and forty-one idiots, and more than two thousand children, subjects of reformatory discipline. This forms a permanent dependent population—dependent through special infirmity—of nearly nine thousand persons.

The pauper population of the State, at the lowest estimate, is upwards of fourteen thousand. This is the average number; for in the city of New York alone more than twenty-six thousand persons in a single year are subjects for a greater or less period of almshouse support. Some of those mentioned as laboring under special infirmity also belong to this class.

I have only to add that the orphan asylums receiving State aid supported over fifteen thousand persons, that the hospitals treated more than six thousand, and the dispensaries more than two hundred thousand patients. From these facts one may comprehend the vastness of the charitable efforts of the commonwealth without reference to the work accomplished by private benevolent institutions.

The permanent property of the institutions under the care of the Board of Charities exceeds, in all probability, twenty millions of dollars. An imperfect estimate in their report contains items amounting to upwards of eighteen millions.

It would naturally be supposed by a person considering these statements that the infirm persons referred to would receive the same general care under some comprehensive and complete system of classification. He would expect to find that the insane, blind, mute, or idiotic were grouped together in separate classes, receiving such care and treatment as were suited to their several necessities. Nothing, however, could be farther from the truth. He would find on actual enquiry that some of the insane are in State institutions, under scientific and most considerate treatment. He would learn that others are in the most deplorable and filthy condition in so-called county asylums. Again, he would discover that some of these institutions are of an excellent character; and finally, it would appear that a considerable number of the insane are in private asylums, subjected to no general superintendence, and whose excellence depends solely on the individual character of the men who from time to time happen to have the management of them. So some of the blind are cared for in State institutions; others are left to the squalor and wretchedness of a county almshouse. For these reasons, it is impossible to present any classification of institutions based upon the infirmity

of their inmates, and the proper treatment which they should receive. I can only consider them as *general*, or supported by the State; *local*, or sustained by counties or cities; and *private*.

The case of the insane deserves still more minute consideration. The provision made by the State for the insane generally (not including the case of the chronic pauper insane) consists of the State Lunatic Asylum at Utica, having accommodations for about six hundred persons; of the Hudson River State Hospital at Poughkeepsie, still unfinished, and an institution projected at the last session of the Legislature, to be placed at Buffalo. There are at present one thousand three hundred and sixteen insane persons in the custody of the State, who have no proper care, but are subjected to such unworthy treatment in the county almshouses as will be hereafter described. It is insisted that the State is derelict in its duty towards these helpless wards in permitting to be added to the dreadful misfortune of want of reason, the unnecessary and preventable evils of squalor, filth, and utter destitution.

True, provision has recently been made for a few of these persons in a noble institution, the "Willard Asylum," beautifully situated at Ovid, on the borders of Seneca Lake. Its buildings and grounds have cost more than three hundred thousand dollars, and it furnishes accommodations for two hundred and fifty insane paupers. It gives me pleasure to make the first public announcement of the fact that this institution has just been opened for the reception of inmates, and will soon be filled. Many have been brought to it already, bound with chains and ropes. One whom the Commissioners of Charities found but a few weeks ago in Columbia County in a state of nudity is now in the Willard Asylum, under the care of a skilful physician, where he is sure to be clothed, if not restored to his right mind. Thus, as Dr. Chapin, the Superintendent, recently writes, has opened a new era in the care of the chronic pauper insane. Soon the day of chains and noisome dungeons will be passed, and we may hope that the pauper bereft of reason will live in well-lighted and ventilated rooms, with kind and considerate treatment; and though

his reason remains for ever darkened, there will be nothing to cause him needless irritation, suffering, or disease, or to offend the sense of humanity in those who look with sorrow upon his condition.

This class of charities crowds upon the attention of public men a question which becomes every day more pressing: How shall our public buildings be constructed? Shall they be palatial structures, like the Inebriate Asylum at Binghamton, which rivals in its luxurious finish the best of our city mansions, or shall they be cheaply constructed with a view to rigid economy? Without stopping to discuss this question, it is enough for the present to suggest that, whatever architectural beauty may be demanded by our growing cultivation, we should never lose sight of the principle that the chief consideration must be the greatest good of the greatest number. A most serious mistake is committed if a splendid home is provided for the few—far superior to that which the sane members of the same class in society possess—while the many remain neglected and destitute. It may be conceded that there are charitable institutions which properly require elegant and tasteful structures, but it is insisted that large expenditure for such reasons is out of place in buildings for the use of insane paupers. If all of this class were provided for as in the Willard Asylum, an expenditure of more than two millions of dollars would be immediately required. Let the buildings be comfortable, plain, and adapted to their wants. There is an opportunity for some skilful architect to render an essential service to the State by devising a plan for asylums of this kind, which shall be at once simple, convenient, in good taste, and comparatively inexpensive. The suggestion may be ventured that there might be established, in connection with the existing lunatic asylums, a pauper branch or division, under the general care of the Superintendent and Board of Managers. Many of the harmless insane might be placed in private families of respectable character, who might be required to make periodical returns of their condition to the Managers. Thus for a comparatively small expenditure the whole of this class might receive suitable care from the State, and be alto-

gether withdrawn from the counties where they are now, with few exceptions, utterly neglected.

It only remains to add a word respecting the private lunatic asylums. These, both incorporated and unincorporated, are estimated to have control over five hundred and fifty persons. They are not under the care of any board, nor subject to any supervision. It is true that they receive no pecuniary aid from the State, and an inspection cannot be had on that ground. It is, however, believed to be a sound rule that no institution should have the power to deprive a citizen of his liberty except upon the condition of public inspection and supervision. The power to inspect should be vested in some superintendent directly responsible to the State. Every interest demands this public oversight, whether that of the individual restrained of his liberty, of the institution exercising the restraint, or of the State. Individual freedom is thus protected, unfounded charges of mismanagement are dispelled, and State authority is vindicated. The English Parliament, appreciating the necessity of such supervision, established in 1845–6 an elaborate system of license and inspection for all private asylums where two or more lunatics are confined. The fullest powers of investigation into all complaints are granted to the commissioners created by the statute, and the right to visit at all times both by day and night is fully conceded to them. This act is highly praised by Mr. May for its humanity and wisdom.* The same general scheme was afterwards extended to Scotland and Ireland. It is just to the managers of some of our private asylums to add that they are advocates of a law placing them under the oversight of "the State Board of Charities." Such an act was brought before the Legislature of 1869, but failed to take effect for reasons which it is not necessary to mention, but which, it is hoped, will not hereafter be found operative.

Of the idiot population of the State (one thousand five hundred and forty-one), only five hundred and sixty-three are held

* May's "Constitutional History of England," ii. 367; 8 and 9. Victoria, chap. 100.

in custody. Nearly one thousand are thus left without any adequate care except that which may be extended to them in private families. Of the five hundred and sixty-three in custody, only two hundred receive suitable attention at the State Asylum in Syracuse, or at the hands of the Commissioners of Charities in the city of New York. The State Asylum has the charge of one hundred and forty, so that about one-tenth of the whole number are directly under State wardship. The institution at Syracuse, under the care of Dr. Wilbur, is thoroughly well managed, and the most gratifying results have been obtained in the way of educating this unfortunate class of beings. His system is simple and philosophical, and his treatment most humane and considerate. There is no charity in the State which is in all respects in a more satisfactory condition. His experience plainly shows that another step must be taken in classification with these persons. Idiots admit of subdivision into two classes: those who can, and those who cannot, profit by instruction. There is already a demand for one or more asylums for the unteachable—inexpensive, yet adapted to the shelter and comfort of persons now neglected in the almshouses and elsewhere, who are doomed to lead a mere animal existence. The unteachable class are wholly out of place at the Idiot Asylum, which is intended for such as can receive instruction; and it is to be regretted that they simply occupy places that should be filled by those for whom the institution was primarily designed.

The limits of this paper will not permit a review of all the State charities. As its purpose is critical, as it seeks to point out such defects as call for speedy remedy, or to present such modifications of existing practices as seem to be improvements, only detailed notice will be taken of those institutions where such suggestions may be made.

An important experiment is now going on in the education of the deaf and dumb at the institution in Bloomingdale, under the care of the Messrs. Peet. Hitherto the only instruction given has been either by written words or by the employment of signs, including not only the use of the fingers in the ordinary manner, but signals made with the loud beating of a

drum, and taps upon the shoulder, etc. These may be considered as including every mode of imparting instruction, except reading from the lips of the teacher and articulate responses. Of late, these have been introduced, and the earnest Superintendent has determined to give this method of teaching a complete and thorough trial. The zeal and skill of an accomplished teacher, Prof. Engelsmann, who has had much experience in Vienna, Austria, have been fully enlisted. I have been a delighted listener to the clear and natural articulation of some of Prof. Engelsmann's pupils. They read words not only from his lips, but from those of strangers, and distinctly pronounced their answers. Some of his scholars show surprising readiness in the acquisition of this kind of knowledge. What a delight to parents who have never heard a child speak, to know that proper instruction may open his lips! What a joy to the child to discover that he, too, has the "divine gift" of spoken language, and can watch and understand, though he cannot hear, the utterances of his parents and friends! Or, to descend to more utilitarian considerations, how much will be added to his means of support if in after years his employers can communicate with him with the swiftness and ease of speech rather than the slower and more studied methods of the hand or the pen! Yet, while important results may be expected, it must be conceded that the whole subject is still in the state of experiment. We can scarcely dare to hope that the sign language can be dispensed with in all cases. Enough, however, has been already done to show that many intelligent mutes, if instructed at an early age, can learn to read from the lips of a speaker, and to make articulate responses. Much credit is to be rendered to the Massachusetts Board of State Charities for the persistency and ability with which its members have pressed this subject upon public attention, and to the zeal, unwearied patience, and great skill of Miss Rogers, at the Asylum in Northampton. It should be added that the processes just described, though new to our institutions, have long been adopted in Europe. It may, however, be anticipated that the success of this system will be as great in this country as

elsewhere, since no official impediment will stand in the way of the fullest trial of an experiment so interesting and so calculated to win the sympathy and support of every person of humanity and intelligence.*

* Mr. Peet's statements on this subject, prepared for this occasion, will command attention:

"The New York Institution for the Instruction of the Deaf and Dumb is the largest educational establishment of its kind in the world. Chartered in 1817, it has been in successful operation upwards of fifty years, and has sent forth a greater number of educated deaf-mutes than any other institution in this country. It has at present under its care 513 pupils.

"The system of instruction originally introduced was that of the Abbé de l'Épée, the eminent French philanthropist, who began to teach deaf-mutes in Paris somewhere between the years 1755 and 1760. The exact date is unknown. This system was modified subsequently by those of Sicard, Degerando, and Bébian, and by the improvements which experience and thought suggested to the educated minds laboring in this cause on this side of the water. The influence of Heinicke, the German contemporary of De l'Épée, did not make itself felt here, though his system has been practised throughout Germany with various modifications up to the present time. De l'Épée adopted natural and artificial signs and the manual alphabet as the chief instruments of deaf-mute education; Heinicke, artificial speech or articulation. On the continent of Europe, the two systems have been more or less combined in many of the institutions, and in some with very gratifying results. In the New York Institution, the language of signs has been developed to a very high degree, so that there is not a thought or turn of expression, or even a word, which cannot be precisely expressed thereby. The advantages derivable from this instrument are that it enables the teacher, with little effort, to convey the exact meaning of words, to test comprehension of written language on the part of his pupils, and also to present ideas to be translated into alphabetic discourse. As a means of mental development it holds the place of a vernacular, and makes it possible to communicate a great amount of instruction long before the pupil would have sufficient knowledge to gain ideas for himself. For public exercises it stands unrivalled among all means of communication possible to the deaf. The disadvantages are: 1st, that it has an idiomatic order of arrangement different from that of modern languages, and induces in the mind of the pupil a habit of thought which makes the practice of written language a translation rather than a spontaneous expression; 2d, that it is so much easier for deaf-mutes to express themselves in this way that they naturally resort to it when not specially cautioned to refrain from it. Practically, in the New York Institution, the use of signs is discontinued in the school-room whenever it is possible to attain the same results by means of the manual alphabet or writing. Within a few years, however, the managers have considered with a growing interest the subject of articulation.

The State institutions for the care of vicious and criminal children are organized upon the "congregate" plan—that of massing them together in large numbers and collecting them under a single roof. They are two in number—one being situated in the city of New York, and the other in Rochester.

Their determination is and has been to leave nothing untried which gives a reasonable promise to ameliorate the condition of those committed to their charge. As the result of patient and thorough investigation, they some time ago reached the conclusion that there are three classes of their pupils who might profitably be taught articulation as a means of communication with others. The first and much the larger class comprises those who learned to speak before they lost their hearing. With these, the labor is to restore a faculty which they have partially lost. There are quite a number of this class now in the institution who show, as the result of faithful teaching, the ability to converse orally with any who will take the trouble to speak slowly and distinctly to them. Another and smaller class is composed of those congenital deaf-mutes whose natural intelligence, flexible organs, and quickness of sight enable them to imitate successfully the movements of the organs of speech. The third class consists of those who have a partial hearing, so defective, however, as not to give rise to articulate speech in the absence of special instruction, so that, previous to education, they stand on no higher plane than those who have been totally deaf from birth. With these, instruction in articulation produces admirable results, as the hearing, combined with lip-reading, enables them to acquire speech with less difficulty, and also produces a favorable influence upon the tones of the voice. After forming this opinion the managers lost no time, but immediately secured the services of three competent teachers who should devote their labors exclusively to this work. The department, as now organized, was originally entrusted to the care of Dr. Orrick Metcalfe, who united with instruction in articulation especial attention to the amelioration of deafness in cases which promised any degree of success. On his retirement, Dr. Rodenstein assumed the care of the cases in aural surgery, and Mr. Bernhard Engelsmann was appointed to discharge the other duties entrusted to Dr. Metcalfe. Prof. Engelsmann has enjoyed rare opportunities of investigation and experience in Germany, and is confessedly the ablest teacher of articulation in this country. He is, moreover, an enthusiastic and earnest believer in his specialty. It is an experiment which the managers are determined shall be faithfully tried, and the public may be sure that neither money nor labor shall be spared to make it successful. It may be proper to add that the Principal of the institution, and several of his associates, already entertain the belief that reading on the lips may be taught even in cases where articulation shall prove a failure, and that this means of addressing the eye of the deaf may be made a matter of much more general application than has heretofore been supposed."

The management of the New York House of Refuge has always been able and efficient. The government of the Western House of Refuge at Rochester was, until recently, too mechanical and repressive. Since the organization of the Board of State Charities a more genial and paternal government has been exercised.

There is an adjourned question, of great practical importance, as to the substitution in the place of the congregate plan of the so-called "family system." In that case, vicious children would be divided into small groups, so that individual influences, closely resembling those exercised in the family, would be brought to bear upon them. These institutions have certainly met with great success abroad, and it is believed that the time has fully come for the trial of the system in New York on a liberal scale. For example, some of the European superintendents who have achieved marked distinction might be induced to come amongst us and to lend us their counsel and talent for organization. It would seem to be the duty of New York to take the initiative in all such matters of charity as promise success, in a noble and high-spirited manner; and by reason of its central position, dense city population, and accumulated wealth, it ought to undertake cheerfully all promising social experiments, instead of waiting, as it has been too much inclined to do, until Massachusetts pays the expenses of the sowing of the seed of which we harvest the successful results.

There are some general remarks which it is worth while to make, applicable to our State charities collectively.

1. As to the diversity of their organization.

They have grown up in a haphazard way, and each is organized under a special statute instead of a well-digested and comprehensive general law. The friends of each institution framed a plan to accord with their own views, and the Legislature was simply called in to sanction their devices. Some of these special statutes are ably drawn, and have produced excellent practical results; others are faulty in plan and injurious in their effects. In some instances, there is a board of managers,

having the power of self-perpetuation; in others, there are trustees, appointed by the Governor and Senate; while at the Inebriate Asylum in Binghamton, there is the singular system of stockholders voting in person or by proxy. To this asylum the State has given upward of half a million of dollars, and yet it has not the smallest voice in its management. Any man who possesses the stock or the proxies has the absolute power of control. It has of late been especially well-conducted, but the State has no security that skilful management will continue. There is but one rule for all State charitable institutions. The voice of the State should be influential in their management. What would be thought of the wisdom of a man of business who should bestow so large a sum as half a million of dollars upon a corporation managed by ten-dollar stockholders, each having a vote, and any one of them, by collecting proxies, having the power to select his own Board of Managers, and to conduct the corporate affairs in accordance with his individual will? Why should not the State devise a general law for the management of its charities, placing them under one system, and under the superintendence and criticism of a single supervisory board?

2. The location of charitable institutions.

This is becoming a very important matter. When the State determines to erect a new State prison or lunatic or other asylum, the present practice is for a number of towns or cities to contend for the honor and pecuniary advantages to be derived from its location. A farm is usually desired, and each town is stimulated to offer to give the requisite land to the State on condition that the institution shall be placed within its own limits. One town thus becomes the rival of another, and the highest bidder is commonly successful. In the case of the Lunatic Asylum established by the last Legislature, it is well understood that, while several towns made pecuniary offers to the State, Buffalo was preferred as being the most liberal in her propositions. So eight or ten towns are now contending for the location of the new State Prison, some of which are heavily laden with debts contracted in the

construction of railroads, and can ill afford to assume additional obligations. Yet the Commissioners having the subject in charge will find it difficult to prevent such pecuniary offers from affecting their judgment so long as the law sanctions or invites them. It best comports with the interest and dignity of the State positively to refuse all such gifts, and uniformly to purchase the sites for its public buildings. If the price of the land is exorbitant, let it be taken, in the last resort, in the exercise of the law of eminent domain.

A brief allusion should be made to some of the evils of the present practice. One of these is that it causes public buildings to be placed in positions unsuited to the wants of the community. Again, the practice leads to the erection of expensive buildings. The town expects to have its donation more than returned in the profits realized by its citizens from the construction account. It has triumphed over competition and secured at much cost a public institution. There must be a splendid building on a commanding site, which shall be a joy to citizens and an object of admiration to strangers. It thus happens that the first appropriation by the Legislature is insufficient, and additional sums must be provided or the buildings will be unfinished and useless. An additional misfortune is that expensive structures are not easily altered to correspond with modern improvements. If the location is bad, it is not readily abandoned. A striking illustration is found in the neighboring Dominion of Canada. The Provincial Penitentiary at Kingston is placed on a low site near the lake, so that it is extremely damp, and the drainage is so imperfect that typhoid fever is a regular inmate. Yet the cost of the massive buildings was so large that it will be with the greatest difficulty that the prison can be removed. Public authorities hesitate long before they come to the inevitable conclusion that so much money has been utterly wasted, and when that result is reached there is still greater hesitation in frankly acknowledging it to the people who pay the taxes.

I have only to add that, when the people of a town subscribe to a public institution, they are apt to feel that they have claims upon its current expenditures. It is credibly reported that,

when the superintendent proposes to purchase supplies elsewhere, he is sometimes obliged to listen to insinuations and complaints from tradesmen that the interests of the town are sacrificed by him. Who can deny that the State ought in such matters to be wholly independent of local influences, and that its officers should be at liberty to buy and sell in the most advantageous market? Petty disputes with local tradesmen also serve to affect the efficiency of the superintendent, as they either keep him in a state of chronic irritability or, if he is yielding and passive, they lower his self-respect. It will be fortunate for the State when its charitable institutions and their officers represent the community, having no obligations, express or implied, toward the towns or cities in which they happen to be placed. Thoughtful men throughout the State deplore the evils of the present practice, and, though they do not cry out against the abuses which have been hinted at, their reprobation is decided and clear, and they will soon make their influence felt.

3. The selection of trustees or managers, and their duties.

But little difficulty has as yet been experienced on this score. In a number of our charitable institutions there has been shown a most commendable and admirable spirit on the part of managers who have devoted gratuitously much time and thought to the subjects confided to their care. But this will not be so always and in all cases. The experience of England teaches us that in charitable foundations of long standing the tendency to mal-administration is almost universal. In the long absence of any general superintendence the abuses there had become frightful. We should be wise in time. There are indications that men begin to seek the position of managers in some cases for pecuniary advantages, in order, it may be, to control the purchases or sales of the institution, or perhaps to make some dependent or friend superintendent.

It is of the first importance to look well to the mode of appointment. The course that has thus far promised most success is the selection by the Legislature, when the charity is organized, of well-known citizens as managers, with power to fill their

own vacancies. In some instances, when the appointing power has been lodged with the Governor, political considerations would seem to have had too much weight. Moreover, a Governor cannot personally know the best men, and is quite likely to be misinformed as to the qualifications of those who are urged upon him. Besides, stringent legislation is required prohibiting any director or manager of a charitable institution from being directly or indirectly interested in the purchase of supplies, or from profiting in any manner by the pecuniary management of the charity with which he is connected.

I now come to the great question of pauperism and its administration—the expenditure of public money in its relief. I shall not enter into the vexed question of the propriety of granting State aid in case of pauperism. My business is with *administration*. I wish to show the scheme which the State has adopted, its working and its defects.

We have adhered in New York substantially to the plan which suggested itself to the statesmen of England about three hundred years ago, in the reign of Queen Elizabeth. It is remarkable in other directions with what tenacity we have clung to the legislative theories of that period. We still manage our county highways on the same rude and clumsy plan as was devised in the reign of Philip and Mary; we settle the estates of deceased friends in local courts patterned after those which were permitted to exist in the reign of Henry VIII.; we care for our poor in the same disjointed methods as were recognized in the Elizabethan days. The principle running through that legislation was *local support* of the poor with *no general superintendence*. The care of paupers was devolved upon parish officials: we have modified this rule by casting it, at the election of the people, upon the counties, though, if the inhabitants prefer, a distinction may be retained between town and county poor, as it is in some counties where the Elizabethan methods are exactly reproduced. Whatever course may be adopted, the results are alike. "The shade in the two cases may be different, but the body of the color is the same."

Under this system there is no unity of plan or settled course

of action. Some counties have established good almshouses, others have notoriously bad ones. Some will excel in one decade of years and decline in another. This fact is illustrated by the distinction between the counties of New York and Kings, on the one hand, and the remaining counties, on the other. The almshouses in these two counties under local management are at present of a very high grade. This excellence in New York at least is recent, and largely due to the efforts of the present Board; and of the exertions and good sense of some of their members it is impossible to speak too warmly in terms of praise. In my remarks on the county pauper institutions I shall exclude New York, reserving it for a separate consideration.

The leading facts which concern the efficiency of the county houses are these:

1. There is, as a general rule, no local interest felt in the care of the poor. The citizens are in other directions public-spirited and generous. They are prosperous, improve their farms and villages, but leave the almshouse in a deplorable condition. There is an apparent cause for this lack of interest. I believe it to be want of knowledge of the facts. There has been no *central authority* to investigate, to publish fearlessly the damaging conclusions arrived at, to arouse interest by public appeals. The publications of the Board of State Charities for this year, if only persistently followed up by continued investigations and frank exposure of the abuses disclosed, will undoubtedly work a great change in public opinion, and ultimately in practical administration.

2. The appropriations for the support of paupers are raised by the vote of local Boards of Supervisors. These are in general composed of persons in each county selected from the respective towns, and thus forming a kind of local legislature for certain specified purposes. It injures the political prospects of a supervisor to so vote as to increase the pecuniary burdens upon his town. Some citizens, without enquiry, reject him as a candidate at a succeeding election if his so-

called "record" during his official term has shown a larger pecuniary expenditure than usual, no matter on what sufficient grounds it may have been made. It must be expected that under such circumstances supervisors will be timid and parsimonious, and will hesitate to correct abuses, while they clearly see that the exercise of a wise liberality will prove the cause of their political destruction.

3. The whole management of the almshouses is purely *official*. Citizens of philanthropic disposition have no part in it. What would our houses of refuge, or idiot asylums, or hospitals for the insane accomplish if there were no public-spirited citizens in their boards to watch and advise—men having no official character, but regarding the suffering of the pauper, the interest of the State, and, guided by their own sense of duty, rendering gratuitous and indispensable service? It is quite certain that, if the State would appoint a permanent commission in each county, of three leading citizens, to inspect, gratuitously, the almshouses four times a year, and report annually to the Supervisors and the State Board of Charities, much would be accomplished even with the present imperfect law. The great point is to secure central supervision, and any reasonable mode calculated to obtain that end should be cheerfully adopted.

4. A more sweeping remark is justified by the facts of the case. Local administration is at present a complete failure. Some wise and comprehensive plan must be presented by which the administration of pauper laws shall be participated in by the public. There should be some central authority, which should furnish plans for buildings, and should have the power to require that the local administration should never be reduced below a certain minimum of comfort and convenience—to see that a proper classification of paupers is made, and that the able-bodied are not in a state of idleness. When such defect of administration exists, it should be pointed out to the local authorities, and, if bad management is still persisted in, there should be an ultimate power in the central authority to

provide the necessary means by an increase of the county levy. Should this reserved power exist, it would probably never be necessary to exercise it.

There is another method which commends itself to many thoughtful minds. This consists in breaking up the almshouses, and distributing the present pauper class among different organizations, and to some extent supporting them in private families. The children should be in orphan asylums; the sick, the idiots, the insane, in hospitals or asylums specially organized for their care. The able-bodied should be placed in workhouses, and the residue of the class should be sustained in families. This system would require some central authority to make proper classifications and to render vigilant and thorough inspection. Well organized, it would be productive of great good, and perhaps supplies the true solution of our present difficulties.

A brief sketch of the administration of the poor laws in our counties is this: As to buildings, many are in extremely bad order, with broken floors, leaky roofs, and in a generally dilapidated condition. This is not universal, for in a considerable number of the counties the buildings are in excellent order and the grounds are tasteful. As to ventilation, there is scarcely one that is tolerable. The air is heated and impure, and severe disease is sometimes contracted by overcrowding. The examination by the Board of Charities was made in the summer, when the windows are open; in winter the air is unendurable. There are no conveniences for bathing. As to classification, it may be said in many of our wealthiest and most populous counties it is disregarded. The young and innocent are indiscriminately herded with the maturely corrupt and vicious. The word "herded" is not too strong, for they are often crowded together in a single room or an open yard. The sexes mingle indiscriminately by day and often by night. Do not blame the keepers, for they have no means to enforce classification. Innocence is corrupted, and the vile increase in villany. Here are able-bodied paupers who live in an enforced idleness, and become parents of children who are to succeed them. There is a growing class of persons who take their pauperism by inheritance. The earnings of those persons are almost nothing.

But the half has not been told. What shall I say of the insane? I wish I could depict their condition so as vividly to present it. I would fain transport the members of this Association to their cells, built in prison style with grated doors, or in the form of dungeons, and allow them to breathe for a moment the close and fetid air. I would point out to them the dirt on the floors, the torn beds and littered straw, and the vermin moving about unmolested. But let us look more closely into the cell; we may find one or more of the insane confined with chains and ropes, irritable and noisy, and disturbing the nerves of those who are inoffensive and quiet. Some of them are in a state of nudity, females as well as males. Those recently afflicted receive no special attention, nor are any general efforts made to alleviate their malady. The usual report from the almshouses naturally is, that of the large number committed few or none improve.

But there is a still more serious charge against this system. It furnishes no adequate protection for insane women exposed to the brutality of the vile men who are found in their company. I do not care to present this subject more distinctly. I have only to say that in some of our counties there is no protection whatever for an industrious and virtuous woman who, having become insane, is sent to the almshouse. Detailed proof of this charge is at hand.

The statements I have made are by no means new. These abuses were pointed out as plainly by Miss Dix twenty-five years ago as they are by me to-night. They were presented in more emphatic language by a select committee of the Senate twelve years ago, and reiterated four years since by the late Dr. S. W. Willard, in an address to the State Medical Society. Why so little progress? I believe that it is owing to the imperfect system inherited from our ancestors, and which this generation has not undertaken to shake off. What is to be done is to secure by adequate plans complete classification, the separation of children from adult paupers, the removal of the insane and idiots to proper homes in public institutions or private families, work for the able-bodied,

separation of the sexes, and suitable protection for feeble-minded women.

Public interest should be aroused in the counties, and it might be well to resort to the mode pointed out in the quaint old statute of Henry VIII.: "Every preacher in his sermons might exhort, move, stir, and provoke people to be liberal, and bountifully to extend their good and charitable dispositions from time to time towards the comfort of the impotent, and the setting and keeping to continual work of sturdy vagabonds and valiant beggars."

It is with relief that I turn to the public charities of the city of New York. The county institutions are placed under a Board of Commissioners of Charities, appointed by the Comptroller of the city, who are paid a moderate salary, and are doing excellent service. I hope that it will not be invidious to say that, while all are capable and efficient, particular credit is due to Commissioner Bowen for his zeal and success in administration. The classification of paupers is very complete, and wherever defects are observable the Commissioners are quick to devise a remedy. The Almshouse really consists of about twenty subordinate institutions, such as an almshouse, blind asylum, inebriate asylum, small-pox hospital, fever hospital, lunatic asylum, children's hospital, idiot asylum, industrial school for vicious children, etc. There is also a very large department for providing out-door relief to those who are not strictly subjects of almshouse support, as well as a labor bureau for obtaining work for the unemployed, and a department for indenturing children at the West. The idiot school, though recently established, is understood to be quite successful.

While the work of the Commissioners is on the whole extremely well done, I venture to submit a few suggestions, more by way of enquiry than of strict criticism. In what I shall say I have had the benefit very recently of a free conversation with a gentleman having great experience in the management of city charities, whose views I represent.* The ventilation is in some respects imperfect, and could be improved without

* Charles L. Brace, Esq.

great expense. There is some question respecting the success of the department for out-door relief. There is a concourse in the winter from the country of men out of employment. The regular professional beggar—"the bummer"—is not always excluded. The plan of giving temporary support to the blind poor is not perfect, and many worthless persons avail themselves of it. The only suggestion to be made is the exercise of greater care in sifting the unworthy from the worthy cases. The labor bureau scarcely answers the ends for which it is established. It is an enormous intelligence office rather than a charity. I am credibly informed by a gentleman that he was present when a lady recently offered a female servant for her services ten dollars per month, which was declined. There is no reason why such persons should secure places at the public expense.

In a view of the public charities of the city of New York, it is impossible to pass without notice the work of the Commissioners of Emigration and the Board of Health. The former is an excellent institution, and a most valuable charity for providing work for the poor. It has some opportunities superior to the Commissioners of Charities in securing places for the laboring classes. Employers are sometimes suspicious of men coming from the latter Board, but no such suspicion attaches to those who are sent forward by the Commissioners of Emigration. That body has great facilities for distributing men throughout the country, is possessed of all needful knowledge to place them where their labor is wanted, and has a large income specially devoted to the good of those of them who are immigrants. It is believed that they support in the winter many idle and able-bodied men on Ward's Island—perhaps one thousand. When spring comes, these men leave the island for other quarters. What is needed is employment, and some manufacturing process should be resorted to which can be easily learned, and which will be sure to keep such men occupied. This Board is a great blessing to the city, and its efforts cannot in general be too warmly commended. Had I time, I should like to describe the operations of the Board of Health, and to make detailed mention of the very valuable services of

Dr. Elisha Harris. I can only venture to enquire whether additional legislation is not necessary to control tenement-houses, and to fix the number of square feet of space to be allotted to each tenant; and whether the time must not soon come when the population living in cellars must be removed, and the question be met as fearlessly as it has been in England, twenty thousand having been so removed in Liverpool alone.

I ought not to pass over a charity which, though not strictly public, is important, and is closely allied in its objects to the almsgiving institutions of the city. I mean the Association for the Relief of the Poor, under the capable management of Dr. Hartley. This does an excellent work at small expense through voluntary agents. There may be cases where sufficient discrimination is not exercised in distributing relief. If so, it might be wise to add a few paid agents, who could be held to stricter accountability.

I have only to add a word as to the city institutions for the care and instruction of children arrested for petty crimes, or neglected and abandoned, and likely to become amenable to criminal justice. There are three of these institutions: the Juvenile Asylum, the Roman Catholic Asylum for the Reformation of Juvenile Delinquents, and the Children's Aid Society. The two former are modelled on the same general plan, receiving such children as are committed by magistrates or voluntarily surrendered to them. They have large numbers under their control, and proceed upon the "congregate system." I am familiar with the working of the New York Juvenile Asylum, which is an excellent institution. The same remark I believe to be true of the Roman Catholic Asylum. There may be some question whether children are not detained too long in these institutions instead of being sent to the Western States. The work of the Children's Aid Society is so peculiar that I should like to describe it more fully. This institution is under the care of a board of fifteen trustees, who visit its various departments, inspect accounts, and are personally active in all its affairs. The Society has the control of twenty industrial schools, containing six thousand children, who are

engaged in industrial occupations for a part of the day. Each school has at least two employed teachers. There are also volunteer teachers, who have an excellent influence on the pupils. These schools have been in operation for fourteen years with remarkable results. Many degraded girls, who would otherwise have lived a life of crime, have been lifted up to respectability and a course of virtue by the process of gradual instruction. Very few of the pupils become criminal. Then there are free reading-rooms for boys; lodging-houses for boys and girls; and evening-schools and Sunday-evening meetings in the lodging-houses. The great feature of this institution is that it transfers so many children to country homes—twenty-five hundred in a single year. There is no indenture executed. There is absolutely nothing to prevent them from returning except the distance. Over fifteen thousand children have been disposed of in this manner. The expense of the transfer is about fifteen dollars. When a proposition is made for settlement in any Western town, a meeting of citizens is called, and a committee determine whether any applicant is a fit person to have the care of one of the children. The Society also employs agents to look after the welfare of its wards in their Western homes. Could there be any charity more simple, inexpensive, and practically useful than this?

I should be glad to consider charities in Brooklyn and other cities, if time and space would permit. The subject is too vast to be properly treated in a single hour. Yet I desired to bring before the Association in a general view the charitable system of the State, at the risk of the imperfect development of some part of my plan. This survey leads to the conclusion that New York is not disposed to lag behind her sister States in her devotion to charity. The spirit of her citizens is noble; the State in its corporate capacity is generous; nothing is wanting but to shake off the fetters of an antiquated system which oppresses and degrades her paupers. She will then act so as to be an object of pride on the part of her citizens, and an example to other States eager to emulate her in all that a large-hearted philanthropy suggests and practical wisdom decides.

THEODORE W. DWIGHT.

THE PUBLIC LIBRARIES OF THE UNITED STATES.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 26, 1869.

ANTIQUARIANS must ever regard with interest the first efforts for the establishment of public libraries in the New World. Like the earliest dawn of the morning light upon the prolonged darkness that preceded, comes the first ray of intelligence that streams from the world of letters upon the untrodden wilderness of America. The first record of books dedicated to a public purpose in that part of this country now occupied by the English-speaking race is, I believe, to be found in the following entry in the Records of the Virginia Company of London:

"*November* 15, 1620.—After the Acts of the former Courte were read, a straunger stept in presentinge a Mapp of S^{r} Walter Rawlighes contayninge a Descripcōn of Guiana, and with the same fower great books as the Guifte of one unto the Company that desyred his name might not be made knowne, whereof one booke was a treatise of St. Augustine of the Citty of God translated into English, the other three greate Volumes wer the works of Mr. Perkins' newlie corrected and amended, wch books the Donor desyred they might be sent to the Colledge in Virginia there to remayne in saftie to the use of the collegiates thereafter, and not suffered at any time to be sent abroade or used in the meane while. For wch so worthy a guifte my Lord of Southampton desyred the p'tie that presented them to returne deserued thanks from himselfe and the rest of the Company to him that had so kindly bestowed them." *

The college here referred to was the first ever founded in

* MS. Records of the Virginia Company, in the Library of Congress.

America, and was seated at Henrico, at the confluence of the James River with the Chickahominy. It was designed not only for the education of the Virginia settlers, but to teach science and Christianity to the Indians. Large contributions were raised in England by Sir Edwin Sandys, and others of the Virginia Company, for its support. But the college and its incipient library were doomed to a speedy extinction. Like so many other brilliant "prospects for planting arts and learning in America," it did not survive the perils of the colonial epoch. It was brought to a period by the bloody Indian massacre of March 22, 1622, when three hundred and forty-seven of the Virginia settlers were slaughtered in a day, the new settlements broken up, and the expanding lines of civilization contracted to the neighborhood of Jamestown.

Harvard College, founded in 1632, had the better fortune to survive the perils of the wilderness, and in 1638 its library was founded by the endowment of John Harvard, who bequeathed to the new college his library and half of his estate. Soon afterwards enriched by the zealous contributions of English Puritans and philosophers, of Berkeley, and Baxter, and Lightfoot, and Sir Kenelm Digby, the first university library in America, after a century and a quarter of usefulness, was totally destroyed with the college edifice in the year 1764 by fire. When we contemplate the ravages of this element, which has consumed so many noble libraries, destroying not only printed books of priceless value, but often precious manuscripts which are unique and irreplaceable, a lively sense of regret comes over us that these creations of the intellect, which should be imperishable, are even yet at the mercy of an accident in all the libraries of the world save a very few. The destruction of books in private hands is natural and inevitable enough, and goes on continually. Whole editions of books, now sought with avidity as the rarest volumes known to literature, have been gradually destroyed in innumerable fires, worn out in the hands of readers, used for waste paper by grocers and petty tradesmen, swallowed up in the sack of towns, or consumed by dampness, mould, or, in rare instances, by the remorseless

tooth of time. Yet there have always existed public libraries enough, had they been fire-proof, to have preserved many copies of every book bequeathed to the world, both before the invention of printing and since. But, when your insurance office is bankrupt, what becomes of the insured? When nearly all our public libraries are so constructed as to invite the flames, the loss of so many books which have completely perished from the earth ceases to be wonderful. You speak of your fire-proof buildings; but what avails it to pile stone upon stone in your exterior, when all the interior is filled with wood, and the books surrounded on three sides with the most combustible material? The Capitol at Washington was considered fire-proof when, in 1851, the Congressional Library was burned up in a night, less than 20,000 volumes being saved from the flames. There is only one path of safety, if we would avoid the risk of repeating those irreparable losses to history and literature which are constantly occurring in the conflagration of libraries, the destruction of city halls and colleges, and the burning of State capitols with all their archives. Let the interior of every library building be encased in iron, the shelves being made of the same material. Then only will the contents be impregnably fire-proof, and the great enemy of literary immortality will knock at their doors in vain.

The growth of Harvard College library, from its second foundation a century ago, has been steady, though at no time rapid. Select and valuable in its principal contents, it has received numerous benefactions from the friends of learning, and promises to become the best, as it already is much the largest, among the university libraries of the country.

The year 1700 witnessed the birth of the first New York library open to public use. The Rev. John Sharp, then chaplain of His Majesty's forces in this city (it was in the days of good King William of Orange), bequeathed his private collection of books to found a "public library" in New York. The library thus organized was placed in charge of the Corporation of the city, and has received occasional brief mention in the proceedings of the Common Council. It was increased in 1729

by a gift from another English clergyman named Millington, who bequeathed his library to the Society for the Propagation of the Gospel in foreign parts, by which it was presented to the Corporation of New York, as the conditions ran, "for the use of the clergy and gentry of New York and the neighboring provinces." Unhappily, these select classes of the community do not appear to have greatly appreciated the gift, for the first city library of New York languished with little or no increase until 1754, when a society of gentlemen undertook to found a public library by subscription, and succeeded so well that the city authorities turned over to them what remained of the Public City Library. This was the beginning of the New York Society Library, one of the largest of the proprietary libraries of the country, which now numbers 57,000 volumes. It was then, and for a long time afterwards, commonly known as "The City Library." In 1772, King George III., whose power over civil affairs in America still prevailed, granted it a charter under the title of "The New York Society Library." During the long occupation of this city by the British army, the books suffered from the wholesale pillage of the soldiers. At the close of the war, the fragments of the library were gathered together, and the Society reorganized. The books grew to the aggregate number of 5,000 volumes in 1793. The Continental Congress profited by its stores, there being no other library open to their use; and the First Congress under the Constitution, which met in New York in 1789, received the free use of the books it contained. The Society Library has migrated five times, improving its quarters with each removal. Located in the City Hall until 1795, it went thence to Nassau Street, opposite the Post-Office, where it continued forty years. In 1836, it migrated to Chambers Street, and, in 1840, to a building erected for its special use at the corner of Broadway and Leonard Street. In 1853 another removal took place to the Bible House, in Astor Place, and it was finally deposited, in 1856, in the elegant building erected for it in University Place, where it now is. The library is conducted on the share system, the payment of twenty-five dollars, and an annual assessment of six dollars, giving any one the privilege

of membership. Temporary subscribers of ten dollars per year are also permitted to draw books.

The same year, 1700, in which the New York Library was founded, ten Connecticut ministers met together at New Haven, each bringing a number of books, and saying, "I give these books for the founding of a college in this colony." Such was the foundation of Yale College, an institution that has done inestimable service to the cause of letters, having been fruitful of writers of books, as well as of living contributions to the ranks of every learned profession. Thirty years later, we find the good Bishop Berkeley pausing from the lofty speculations which absorbed him, to send over to Yale College what was called "the finest collection of books that ever came together at one time into America." For a century and a half the growth of this library was very slow, the college being oppressed with poverty, and numerous collateral uses being discovered for its funds. In 1849, the number of volumes had risen only to 20,515, but it is cheering to relate that the last twenty years have witnessed a growth so rapid that in 1869 Yale College Library has 50,000 volumes, besides almost as many more in the various society libraries of the students.

The fourth considerable library founded in the United States was due in a large degree to the industry and zeal for knowledge of the illustrious Franklin. As unquestionably the first established proprietary library in America, the Library Company of Philadelphia merits especial notice. Not even the dazzling splendor of the million-dollar bequest that has but recently fallen into its lap can eclipse the enlightened and far-seeing spirit which presided over its origin. Let us reverently take a leaf out of the autobiography of the printer-statesman of Pennsylvania:

"And now I set on foot my first project of a public nature, that for a subscription library. I drew up the proposals, got them put into form by our great scrivener, Brockden, and by the help of my friends in the Junto [the Junto was a club for mutual improvement, founded by Franklin] procured fifty

subscribers at forty shillings each to begin with, and ten shillings a year for fifty years, the term our company was to continue. We afterwards obtained a charter, the company being increased to one hundred; this was the mother of all the North American subscription libraries now so numerous. It is become a great thing itself, and continually increasing. These libraries have improved the general conversation of the Americans, made the common tradesmen and farmers as intelligent as most gentlemen from other countries, and perhaps have contributed in some degree to the stand so generally made throughout the colonies in defence of their privileges."

When this Philadelphia Library was founded, in 1731, not a single city or town in England possessed a subscription library. Even the library of the British Museum, since become the greatest collection of books in the world, save one,* was not opened until 1759, more than a quarter of a century afterwards. Although not designed as a public library of circulation, save to its own subscribers, the Philadelphia Library has been kept free to all for reference and consultation. The regulations under which its earliest librarian acted expressly "permit any civil gentleman to peruse the books of the library in the library rooms." The record of the gradual increase of the first Philadelphia Library from its first few hundred volumes, when Franklin was but twenty-five years of age, to its present rank as the second proprietary library in America, with 85,000 volumes of books, is highly interesting. Its history, in fact, is to a large extent the history of intellectual culture in Philadelphia, which remained, until the second decade in the present century, the foremost city of the Union in population, and, from 1791 to 1800, the seat of government of the United States. Its list of corporators has always borne the names of most of the men who have been eminent in science or letters in the Quaker City, and a large proportion of those of fortune and social distinction. The number of its shares which have descended in an unbroken line in the same family for generations, is unprecedentedly large.

* The Bibliothèque Impériale, at Paris.

In 1751, James Logan, a man of liberal knowledge and eminent political ability, bequeathed to the city of Philadelphia his private library of 2,000 volumes, then valued at $10,000. Besides the books, he gave a suitable building for their reception, and certain rents to constitute a fund for the pay of a librarian, and to increase the collection. The whole were vested by will, in trustees, for the use of the public for ever. After forty years' very indifferent administration of the trust, during many of which the library remained unopened, the trustees, following the example of the city government of New York, turned over the only free public library of Philadelphia to a private corporation. An act was procured from the Legislature of Pennsylvania annexing the Loganian Library to that of the Library Company of Philadelphia, under certain restrictions, and it was opened to the public in 1794 as a branch of that institution, and still remains so.

The Philadelphia Library Company, in 1774, voted that "the gentlemen who were to meet in Congress" in that city should be furnished with such books as they might have occasion for; and the same privilege was exercised on the return of the Government to that city, in 1791, and until the removal of Congress to Washington in 1800. During the nine months' occupation of Philadelphia by the British army, it is refreshing to read that the conquerors lifted no spear against the Muses' bower, but that "the officers, without exception, left deposits, and paid hire for the books borrowed by them." The collection, in respect of early printed books, is one of the largest and most valuable in America, embracing many books and files of newspapers which are to be found in no other public library. The selection of new books has been kept singularly free from the masses of novels and other ephemeral publications which overload most of our popular libraries, and the collection, although limited in extent in every field, and purposely leaving special topics, such as the medical and natural sciences, to the scientific libraries which abound in Philadelphia, affords to the man of letters a good working library. The shares in the library cost forty dollars, with an annual assessment of four dollars to each stockholder. Besides, any person is free to consult

books within the library, and to borrow most works belonging to it, upon deposit, a highly valuable privilege, which renders the absence of a free public library of circulation in the great city of Philadelphia less conspicuous.

Within a week past, the great bequest of Doctor James Rush to the Philadelphia Library of his whole property, valued at over $1,000,000, has been accepted by its stockholders, by the bare majority of five votes in a poll of over five hundred. This lack of harmony is attributable to the fact that the bequest, so generous in itself, was hampered by the donor with numerous conditions, deemed by many friends of the library to be highly onerous and vexatious. Not the least among these was the following, which is cited from the will itself:

"Let the library not keep cushioned seats for time-wasting and lounging readers, nor places for every-day novels, mind-tainting reviews, controversial politics, scribblings of poetry and prose, biographies of unknown names, nor for those teachers of disjointed thinking, the daily newspapers."

Here is one more melancholy instance of a broad and liberal bequest narrowly bestowed. The spirit which animated the respectable testator in attempting to exclude the larger part of modern literature from the library which his money was to benefit may have been unexceptionable enough. Doubtless there are evils connected with a public supply of frivolous and trifling literature; and perhaps our periodicals may be justly chargeable with devoting an undue proportion of their columns to topics of merely ephemeral interest. But it should never be forgotten that the literature of any period is and must be largely occupied with the questions of the day. Thus, and thus only, it becomes a representative literature, and it is precious to posterity in proportion as it accurately reflects the spirit, the prejudices, and the personalities of a time which has passed into history, leaving behind it no living representatives. If we admit that the development of the human intellect at any particular period is worth studying, then all books are, or may become, useful. It is amazing that a person with any pretensions to discernment should denounce newspapers as

unfitted to form a part of a public library. The best newspapers of the time are undoubtedly the best books of the time. The greater part of the published literature of our day is in no respect elevated above the daily journals, whether as regards dignity of subject, breadth of view, elevation of aim, or excellence of style. Many of these books have appeared for the first time in the columns of newspapers, and many others find their chief use, and are first reduced to order, condensation, and coherence, when distilled through the alembic of the daily press. A first-class daily journal is an epitome of the world, recording the life and the deeds of men, their laws and their literature, their politics and religion, their social and criminal statistics, the progress of invention and of art, the revolutions of empires, and the latest results of science. Grant that newspapers are prejudiced, superficial, unfair; so also are books. Grant that the journals often give place to things scurrilous and base; but can there be anything baser or more scurrilous than is suffered to run riot in books? There is to be found hidden away in the pages of some books such filth as no man would dare to print in a newspaper, from fear of the instant wrath of the passers-by.

I trust that you will pardon me if, in this apparent digression from my theme, I have been betrayed into undue warmth; but, when I consider the debt which libraries and literature alike owe to the daily and weekly press, it is difficult to characterize with patience the Parthian arrow flung at it from the grave of a querulous millionaire, who will owe to these very newspapers the greater part of his success and all of his reputation. The father of the respectable testator, Doctor Benjamin Rush, has left on record many learned speculations concerning the signs and evidences of lunacy. We may now add to the number the vagaries of the author of a ponderous work on the human intellect, who gravely proposes to hand over to posterity an expurgated copy of the nineteenth century, with all its newspapers left out.

The Library of Congress, or, as it was called in its first general catalogue in 1815, "The Library of the United States,"

was founded, in 1800, by the purchase of a thousand dollars' worth of books by act of Congress. It had grown to the number of only 3,000 volumes in 1814, when the British army made a bonfire of our national Capitol, and the library was consumed in the ruins. The first library of Congress being thus destroyed, Ex-President Jefferson, then living, involved in debt, and in his old age, at Monticello, offered his fine private library of 6,700 volumes to Congress, through friends in that body, the terms of payment to be made convenient to the public, and the price to be fixed by a committee. The proposition met with able advocacy and also with some warm opposition. It is illustrative of the crude conceptions regarding the uses of books which prevailed in the minds of some members, that the library was objected to on the somewhat incongruous grounds of embracing too many editions of the Bible, and a number of the French writers in sceptical philosophy. It was gravely proposed to pack up this portion of the library, and return it to the illustrious owner at Monticello, paying him for the remainder. More enlightened counsels, however, prevailed, and the nation became possessed, for about $23,000, of a good basis for a public library which might become worthy of the country. The collection thus formed grew by slow accretion until, in 1851, it had accumulated 55,000 volumes. On the 24th of December in that year, a defective flue in the Capitol set fire to the wood-work with which the whole library was surrounded, and the result was a conflagration, from which 20,000 volumes only were saved. Congress at once appropriated, with praiseworthy liberality, $75,000 for the purchase of new books, and $92,500 for rebuilding the library room in solid iron; the first instance of the employment of that safe and permanent material, so capable of the lightest and most beautiful architectural effects, in the entire interior structure of any public building. The appropriation of $75,000 was principally expended in the purchase of standard English literature, including complete sets of many important periodicals, and a selection of the more costly works in science and the fine arts. In 1866, two wings, each as large as the central library, and constructed of the same fire-proof material, were

added to it, and quickly filled by the accession, the same year and the following, of two large libraries, that of the Smithsonian Institution, and the historical library of Peter Force, of Washington. The latter was the largest private library ever brought together in the United States, but its chief value consisted in its possession of a very great proportion of the books relating to the settlement, history, topography, and politics of America, its 45,000 pamphlets, its files of early newspapers of the Revolution, its early printed books, and its rich assemblage of maps and manuscripts, many of the latter being original autographs of the highest historical interest. The Smithsonian library, the custody of which was accepted by Congress as a trust, is rich in scientific works in all the languages of Europe, and forms an extensive and appropriate supplement to the Library of Congress, the chief strength of which lies in jurisprudence, political science, and books relating to America. Yet no department of literature or science has been left unrepresented in its formation, and the fact has been kept steadily in view that the Library of the Government must become, sooner or later, a universal one. As the only library which is entitled to the benefit of the Copyright law, by which one copy of each publication for which the Government grants an exclusive right must be deposited in the National Library, this collection must become annually more important as an exponent of the growth of American literature. This wise provision of law prevents the dispersion or destruction of books that tend continually to disappear; a benefit to the cause of letters, the full value of which it requires some reflection to estimate.

This National Library now embraces 183,000 volumes, besides about 50,000 pamphlets. It is freely open, as a library of reference and reading, to the whole people; but the books are not permitted to be drawn out, except by Senators and Representatives for use at the seat of government. Two things it yet needs to complete its usefulness, both to our national legislature and to the people by whose means it has been built up and sustained. First, the completion (now nearly accomplished) of its printed catalogue of subjects, which will furnish a com-

plete key to unlock its treasures; and, secondly, to be thrown open to readers during the evening as well as during the hours of business. Its value to the numerous class employed in the public service would thereby be incalculably increased; and, if Washington is ever to become anything more than an insignificant city, it should present every reasonable privilege and attraction, both to residents and sojourners, which it is in the power of the Government to supply.

The library of the Boston Athenæum originated, in the year 1806, with a society of gentlemen of literary tastes, who aimed at creating a reading-room for the best foreign and American periodicals, together with a library of books. To this a gallery of art was subsequently added. The undertaking proved at once successful, leaving us to wonder why cultivated Boston, though abounding in special and parish libraries, should so long have done without a good general library; New York having anticipated her by fifty-two years, and Philadelphia by three-quarters of a century. The Athenæum has been fortunate in its benefactors, and has been repeatedly enriched by the judicious generosity of its own members, rather than by the bequests of strangers. Its library is peculiarly rich in files of American newspapers, both old and new, and its collection of pamphlets is probably the largest in the country. In literature and science it embraces a heavy proportion of the best books, its total number of volumes being now reckoned at 100,000. Its collection of books, pamphlets, and newspapers relating to the recent civil war is among the completest known. The price of a share in the Athenæum is three hundred dollars, a large sum when compared with that of other proprietary libraries; but it involves much more valuable property-rights than any other. The annual assessment is five dollars to shareholders, who alone possess the right to draw books. The proprietors have also the power to grant free admission to others, and the library and reading-room are thus thrown open for reference to a very wide range of readers.

The history of the Astor Library, founded by a bequest

made in 1839, though not opened until 1854, has been made too familiar by repeated publication to need repetition here. The generous founder gave two per cent. out of his fortune of $20,000,000 to create a free public library for the city which had given him all his wealth. The gift was a splendid one, greater than had ever before been given in money to found a library. Moreover, the $400,000 of Mr. Astor, twenty-five years ago, appeared to be, and perhaps was, a larger sum than four millions in the New York of to-day. Yet it remains true that the bequest was but one-fiftieth part of the fortune of the donor, and that the growth and even the proper accommodation of the library must have stopped, but for the spontaneous supplementary gifts of the principal inheritor of his vast wealth. These, fortunately for New York, have been neither few nor small. When it is considered how noble a collection of books is here brought together, how many of the costliest works in every department of art and science are opened freely for general consultation, how encyclopædical and yet how select is the library, it may seem invidious to remark that New York has not yet realized from the Astor bequest, what the terms of the will would seem to call for, "a public library, accessible at all reasonable times and hours, for general use, free of expense to persons resorting thereto." The fact that the people of this city enjoy in the Cooper Institute, through the wise and liberal endowment of a private citizen, a free reading-room filled with the best periodicals, American and foreign, and open to all comers both day and evening, renders the somewhat stringent regulations of its only free public library the more conspicuous. Doubtless there would be some inconvenience and expense in throwing open the doors of the Astor Library during those evening hours when alone it is possible for most readers to avail themselves of its stores. But there are no difficulties which could not readily be surmounted, certainly none to be compared with the existing loss and deprivation of intellectual aid which is sustained by so many. Is it fitting that this great temple of learning should be permanently isolated from the mass of students as well as of general readers? The public regards with permanent favor those in-

stitutions alone which answer the ends of the highest utility; and the just pride which every New Yorker feels in the Astor free library is tempered by the sad reflection that it is deemed necessary to close the gates of knowledge punctually half an hour before the sun goes down.

While no library in America has yet reached 200,000 volumes, there are more than twenty in Europe, if we may put faith in statistics, which have passed that number. Some of these, it is true, are merely repositories of ancient and mediæval literature, with a considerable representation of the books of the last century, and but few accessions from the more modern press. Such, for the most part, are the numerous libraries of Italy, while others, like the Library of the British Museum, in London, and the Imperial Library, at Paris, are about equally rich in ancient and modern literature. The latter library, which is at present the largest collection in the world, possesses over 900,000 volumes, besides 500,000 pamphlets; while the British Museum Library has now more than 750,000 volumes. The one great advantage which European libraries possess over American consists in the stores of ancient literature which the accumulations of the past have given them. This advantage, so far as manuscripts and early printed books are concerned, can never be overcome. With one or two hundred thousand volumes as a basis, what but utter neglect can prevent any library from becoming a great and useful institution? The most moderate share of discrimination, applied to the selection of current literature, will keep up the character of the collection as a progressive one. But with nothing at all as a basis, as most of our large American libraries have started, the rate of progress seems slow, and the results hitherto small.

In the "American Almanac" for 1837 was published the earliest statistical account of American libraries which I have found. It is confined to a statement of the numerical contents of twenty public and university libraries, each containing over 10,000 volumes. The largest library in the United States at that date (thirty-two years ago) was that of the Philadelphia Library Company, which embraced 44,000 volumes. The first

organized effort to collect the full statistics of libraries in the United States was made, in 1849, by the late Professor C. C. Jewett, then of the Smithsonian Institution, and the results were published in 1851, under the auspices of that institution, in an octavo volume of 207 pages. It contains interesting notices of numerous libraries, only forty of which, however, contained as many as 10,000 volumes each. In 1859, Mr. W. J. Rhees, of the Smithsonian Institution, published "A Manual of Public Libraries, Institutions, and Societies in the United States," a large volume of 687 pages, filled with statistical information in great detail, and recording the number of volumes in 1338 libraries. This work was an expansion of that of Professor Jewett. The next publication of the statistics of American libraries, of an official character, was published in "The National Almanac" for the year 1864, pp. 58–62, and was prepared by the writer of this paper. It gives the statistics of 104 libraries, numbering 10,000 volumes and upwards, exhibiting a gratifying progress in all the larger collections, and commemorating the more advanced and vigorous of the new libraries which had sprung into life.

I have prepared a table of the numerical contents of the ten largest libraries in the country in 1869, for a portion of which I am indebted to Justin Winsor, Esq., Superintendent of the Boston Public Library, whose next annual report will contain much information regarding the comparative statistics of libraries:

1.	Library of Congress, Washington, ...	183,000
2.	Boston Public Library, Boston, ...	153,000
3.	Astor Library, New York, ...	138,000
4.	Harvard College Library, Cambridge, ...	118,000
5.	New York Mercantile Library, New York, . .	104,500
6.	Boston Athenæum Library, ...	100,000
7.	Philadelphia Library Company, ...	85,000
8.	New York State Library, Albany, ...	76,000
9.	New York Society Library, New York, . . .	57,000
10.	Yale College Library, New Haven, ...	50,000

The libraries of the United States naturally divide them-

selves into classes, according to the agencies by which they are founded, and the purposes which they are intended to subserve. First, there come the proprietary libraries, which number many of the largest and best—notably, the Boston Athenæum Library, the New York Society Library, and the Library Company of Philadelphia. The numerous mercantile libraries are properly a branch of the proprietary, though depending mostly upon annual subscriptions. The earliest of these was the Boston Mercantile Library, founded in 1820, and followed closely by the New York Mercantile Library, established the same year, the Philadelphia Mercantile in 1821, and the Cincinnati Mercantile in 1835. Such subscription libraries are, from the nature of the case, more largely composed of ephemeral books, known as light reading, than any others. Next we have the professional libraries, law, medical, scientific, and, in a few instances, theological. These supply a want of each of these important professions seldom met by the public collections, and are proportionably valuable. Then come public libraries, founded by individual bequest, of which the principal are the Astor Library, at New York, the Watkinson Reference Library, at Hartford, and the Peabody Institute Libraries, of Baltimore, Maryland, and Peabody, Massachusetts. Then there are the various State Libraries, founded at the public charge, and designed primarily for the use of the respective legislatures of the States. The earliest of these is the New Hampshire State Library, established about 1790, and the largest is the New York State Library, at Albany, founded in 1818, now embracing 76,000 volumes, and distinguished alike by the value of its stores and the liberality of its management. Every State in the Union has now at least a legislative library, although the most of them consist chiefly of laws and legislative documents, with a few works of reference superadded; and their direct usefulness to the public is therefore very circumscribed. The New York State Library is, however, a model of what a great public library should be in the capital of a State. In it are gathered a great proportion of the best books in each department of literature and science, while indefatigable efforts have been made to enrich it in whatever re-

lates to American history and polity. Its reading-room is freely open to the public during twelve hours daily.

Of parish libraries, and the libraries of Sunday-schools and Bible classes throughout the country, there is no call to speak, since they are, in no sense, public libraries of resort. The aggregate number of volumes contained in them has been roughly estimated at from five to six millions; but such statistics are purely conjectural, and of no possible value.

Of the school-district library system, and its wide extension in some of our States, little is publicly known. I have prepared a summary of the State legislation by which these libraries are created and charged upon the school taxation fund of the respective States, but there is no room for its detail here. This free-school library system, originated by New York in 1838, has now extended to eleven States, namely: Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, Ohio, Indiana, Michigan, Illinois, and Wisconsin.

Of city and town libraries, created by voluntary taxation, a class of libraries started in Great Britain no earlier than the year 1850, there is as yet little to be recorded in this country outside of New England. This system of creating libraries proceeds upon the principle that intellectual enlightenment is as much a concern of the local government as sanitary regulations or the public morality. Society has an interest that is common to all classes in the means that are provided toward the education of the people. Among these means free town or city libraries are one of the most useful. Massachusetts, in no less than fifty of her towns and cities, has recognized the principle that public books are just as important to the general welfare as public lamps. What the public need are libraries open to the people as a matter of right, and not, as in New York and other cities, as a matter of favor.

The largest library in the country, save one, owes its origin and success to this principle, combined with large private munificence. The Boston Public Library is unquestionably the most widely useful collection of books open to the public in this country. Of all the great collections, it is the only one

which lends out books free of charge to all citizens. Instituted in 1852, its career has been one of rapid progress and ever-widening usefulness. I shall be the more readily pardoned for not dwelling upon it at length, as the facts regarding it have been more widely published than those relating to any other library.

What part of literature should our public libraries embrace? is a question of commanding interest. The answer is to be sought in the final aim of each. It is certainly important to secure, in every library which cannot be universal in its character, the best books in each department of literature and science, and the best books only. Yet the difficulties of selection are of the most embarrassing character, and are annually increasing. While a professional library has its closely-defined limitations, and will be likely to purchase only the books which contain some positive contribution to knowledge in its special field, the libraries of miscellaneous reading, on the other hand, are left without chart or compass, to gather at hap-hazard from the immense mass of worthy and worthless books of which the modern press is fruitful. None of the so-called "Courses of English reading" which have been adventured as guides to inexperienced book collectors and students appear to be of value. They are all at least a quarter of a century in arrear as regards modern literature, and the largest and most pretentious of them, that of Pycroft, affords a model to be avoided in its principal contents, as well as in its style of composition.

The only entirely safe counsel that can be given is too conservative for the current wants of any library which aims at even a moderate degree of popularity. To await deliberately the verdict of the years, after the well-known Horatian maxim, or even to delay adding the latest novelties to its attractions until six months have scantly flown (and with them, perchance, borne many flaming literary reputations into oblivion), would be too much to expect of any library which derives its patronage from a miscellaneous public. Yet some selection must indispensably be made, as well of the older

literature as of the current issues of the press. There is greatly needed, for the use of libraries that are springing up with such rapidity in all parts of the country, a manual which should be carefully representative of the books which have best sustained the test of enlightened criticism. It is gratifying to know that the labors of this Association will shortly be turned in this direction.

A prominent journal of this city recently proposed what it was pleased to term a "weeding out" of the National Library at Washington, upon the suggestion of the impending need, in a few years' time, of more space to accommodate its fast increasing stores. Weeding is a healthful process, doubtless, whether viewed agriculturally or intellectually: but it may be pertinent to ask, When it comes to be applied to our great libraries, who is to superintend the process, and what guarantee have we that it will be judiciously performed? What shall be thrown out as useless lumber, and what retained and cherished as the pure gold of literature or science? Do learned editors ever reflect whether their own works, in multitudinous volumes, in grand folio, might not perchance be the first to go out under the "weeding" process? Yet no writer or student who has hunted for facts through many libraries in vain, can underrate the immense value of complete files of the daily press. It is easy to stigmatize as "trash" the greater mass of the books with which our libraries are crowded. It is easy to find self-constituted censors, who would undertake the "weeding" of them with alacrity; but who shall censure the censors, who certify to the public the justice of their judgment? Nay, is there any tolerable degree of certainty that they would be able long to agree with one another?

When the priest and the barber, in the immortal romance of Cervantes, undertook to weed the library of Don Quixote of those accursed books which had done him so much mischief, they met with some unexpected obstacles. Not every book that the priest condemned was sacrificed by the barber, and not every book that went overboard by the joint consent of both, reached the flames upon a second examination.

Be as exclusive as you will with your own private collection; it is your right, your duty, and your interest to winnow it with the utmost care; but a great public library has, or should have, for one of its ends to keep the very books which smaller ones have neither space, nor money, nor inclination for. The only safe rule for the private library is, exclusiveness; that of the public one, inclusiveness. What is husks and straw to one reader is solid *pabulum* to another; nay, that which appears trash to you to-day may, next year, turn out to have a wholly unexpected value. I have seen a great scholar kindle into eloquence over a dingy volume of controversial divinity, which appeared to me to contain nothing but the most dismal platitudes. The credulous world has mourned for twelve centuries the loss of a fabulous Alexandrian library of 700,000 volumes, burned by the Caliph Omar, with a fictitious rhetorical dilemma in his mouth. Yet the hyperbole of antiquity is realized in a modern editor, who would apply the torch before our largest library has yet reached two hundred thousand.

The idea that books are valueless except it be to be read through, is one that could find a lodgment only in an inconsiderate mind. "We need more books," said a learned professor of an American college to a rich merchant, who had helped to fill the small but well-chosen library. "More books!" said the merchant. "Why, have you read through all you have already?"

"No; I never expect to read them all."

"Why, then, do you want more?"

"Pray, sir, did you ever read your dictionary through?"

"Certainly not."

"Well, a library is my dictionary."

The learned Bishop Huet said that all which has been written since the beginning of the world might easily be contained in nine or ten folio volumes, *provided* nothing were said but once. This proviso is the key to the vast "*Copia librorum*" which makes the despair of scholars. So long as men go on repeating one another, so long will this superfœtation of literature continue. You may put all the ancient classics, both

Greek and Latin, into a single case of very moderate dimensions; but the manifold echoes and reëchoes of the ancients which fill these twenty centuries give point to the saying of Burton, the anatomist of melancholy, that "the most of literature is but the pouring out of one bottle into another."

It was a whimsical remark of the great satirist, Rabelais, that "one ought to buy all the bad books that come out, because they will never be printed again." Of the new works published in any given century, how few ever arrive at the honor of a republication at all? And of those that are printed for a few successive years in vast editions, how many are thought worthy of a reprint by the century succeeding? And will any one learned in the history of literature tell us how many, out of all the candidates crowding after immortality, ever reach it, by the suffrage of each succeeding century, calling for ever new editions? Is not the fate of at least ninety-nine in the hundred writers a swift passport to oblivion, or, at the least, a place among the hecatombs of neglected volumes which slumber upon the shelves of the great libraries of the world? Yet Thomas Fuller quaintly tells us that "learning hath gained most by those books by which the printers have lost." And many a lonely scholar has fed his eager brain upon the obscure wisdom of some forgotten volume, until his own genius has haply quickened into eloquence, or flowered into song.

The essential falsity of many of the *ex-cathedra* judgments so often pronounced upon literature is well illustrated in the saying which became a proverb with the scholars of the eighteenth century:

"If you would know what books are best worth reading, look in the Index Expurgatorius."

By a law as inevitable as gravitation, the books of every period tend continually to find their proper level. The judgment of mankind is made up upon each work, although it may not be executed speedily. No permanent rank in the hierarchy of letters is ever settled by chance, any more than by excommunication. Very vain is the endeavor to write down any author.

"Who writes by fate, the critics shall not kill,
Nor all the assassins in the great review:
Who writes by luck, his blood some hack shall spill,
Some ghost whom a mosquito might run through."

The true question to ask respecting any book is, Has it helped any human soul? If yes, then it has as good a right to be, and as much honor in being, as any of those living creatures of God, myriads of whom are born and die without demonstrating to the majority of their fellows any adequate reason for their existence.

The absence of any really extensive library at any one of our great cities is still seriously felt by the writers of the country. Neither in New York nor elsewhere have we a single public library adequate to satisfy the researches of scholars. The late John Quincy Adams undertook the collection of all the authorities cited by Gibbon, in his "History of the Roman Empire;" and he has recorded that less than half of them were then to be found in our largest libraries. Our historical writers have all been driven abroad, not only for original materials, but for multitudes of printed books and works of reference. Add to this, that few of our best libraries are open during those hours most employed by students, and the array of impediments in the path of the scholar becomes appalling. If he is a man of fortune, he will of course collect nearly all books in his special field, rather than be dependent upon the uncertain aid of public libraries. In no country are there found more numerous and more liberal collectors of private libraries than in the United States. The literary treasures which have been amassed outside the walls of public institutions are so great as continually to awaken the wonder and excite the envy of the latter. When we hear of the 100,000 volumes of the Boston Athenæum, or the 138,000 of the Astor, or of the 183,000 of the Library of Congress, we are accustomed to think of all private collections as very small and imperfect in the comparison. But, taken *en masse*, it is not to be doubted that the private libraries very far outrun the public ones in their aggregate of volumes, while, in respect of rare and costly books, there are multitudes of works in

private hands of which no public library in the country possesses a copy. The plain suggestion to be drawn from these facts is twofold: first, that more interest should be manifested by collectors and students in completing our public libraries by voluntary bequests of their stores; and, secondly, that the managers of our leading libraries should be constantly and vigilantly on the alert to secure the needful volumes that would complete them in any department of letters. No adequate history of English literature, nor even of any one of its departments, could be written in America, for the one sufficient reason that the books do not here exist. None of our largest collections is sufficiently representative either of the history, the poetry, the fiction, the philosophy, or the theology of English literature (in which, of course, the American is meant to be included) to afford materials to the critic and historian on which to base his judgments. We can but conclude, in summing up the results of any careful enquiry into the history and condition of our American libraries, that, while much has already been done, much the greater part remains to do.

AINSWORTH R. SPOFFORD.

THE SCIENCE OF TRANSPORTATION.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 28, 1869.

I HAVE ventured to entitle the subject upon which I am about to speak "The Science of Transportation." Science has been defined as organized knowledge, and such knowledge upon any special subject should be deemed a special science, if the subject be large, its known facts manifold and widely ramified, and its unknown facts presumably still more important, numerous, and far-reaching. I hope to indicate reasonable grounds for declaring that transportation should now rank as a science, and that, when incompetent charlatans undertake to expound or apply its laws, they deserve a much sterner repression than the public have as yet accorded.

The necessary brevity of a paper like this forbids an exhaustive consideration of its subject. I shall confine myself, therefore, to three of its phases, viz.:

A brief history of its growth;

The transportation of property as at present conducted by railway.

Its future possibilities;

The power to change at pleasure, and to any extent, the localities of ideas, of persons, and of property; with punctuality, with promptness, with safety, and without large expenditure of labor, has always been a desideratum for mankind. According to the degree of perfection reached by any people in this respect, has been their relative rank in civilization. Yet, prior to the present century, the efforts to this end had achieved but little, at least when compared with the extraordinary advances since accomplished. The preliminary difficulties have always arisen from the undulations of the earth's surface; from its yielding character, especially when affected by water

or recovering from frost; from the natural obstructions which cumbered it, and from its intersection by water-courses of varying volume and frequent impassability. The earliest efforts to overcome these, though evincing much vigor, still attempted nothing beyond so removing obstructions on some continuous line as to fit it for a pathway available for footmen or animals. The next advance formed upon this pathway a drained surface of artificial hardness, and supported it across and above water-courses, and beyond trouble from their variations of volume. Then came moderate gradation, and the contrivance of a platform or body set on rollers or wheels for reducing friction; which body, laden with the person or article to be moved, was dragged over the pathway.

It was evident that the retarding effect of gravitation was increased upon ascending slopes, and was least upon a level, being then simply a pull at right angles to the plane of resistance. To reach this minimum most easily was clearly to seek pathways naturally level. Bodies of water were so, and were early utilized, and, when sure guidance over their broad surfaces had been compassed, their value as pathways became immense. Routes following water-courses approximated a level, and, unless out of the general direction in which transportation was sought, were always, under wise pathmakers, selected for improvement. Failing these, hills could be lowered and valleys filled, but only by expending labor; and if the hills were so high and vales so low that their levelling would involve more outlay than sufficed to transport around or up and down some part of their slopes, then pathways were curved around obstacles, or large undulations were but partially reduced, by using gentle inclines instead of the too costly level.

The amount of friction due to the rubbing of rough surfaces was the most palpable of frictional effects to be lessened, and two methods were used for this purpose: the adoption of a fluid as the pathway—either in its fluid state, as water, or solid, as water frozen—and the removal of roughnesses by making the pathway harder, more unyielding, smoother, and providing the friction-wheels with lubricants at the bearing-points

of their axles. The first method gave ocean, lake, and canal navigation, and sledges moving on snow or ice; the second, wheeled wagons traversing hard surfaces.

A cheaper and more untiring power than could be obtained from men or animals was found in so attaching wide surfaces or sails to the vehicle to be moved as to receive against them the push of air-currents. But the force of these currents was too variable to ensure prompt punctuality, and their direction too shifting, and too frequently contrary to the desired course; so they could be desirably used only upon large exposed districts, such as extensive bodies of water. This century, however, saw the first successful use, as a motor, of the force of water suddenly expanded by heat; and the results of this discovery, and of forming iron-surfaced roadways, have been too vast for easy comprehension.

A still more wonderful improvement is the device of the electric telegraph for the transportation of ideas. It has a pathway, a motor, and a rate of speed, but so different from the same features in other methods of transportation as not to seem part of the gradually evolved system now in vogue, but a sudden creation, far more perfect than any other achievement hitherto attained. It is, however, only adapted to the transmission of ideas—an indispensable service, but one which requires far less outgo of labor than the movement of persons or things. In 1868, the outlay in dollars (which express labor) was less in the whole United States for transmitting ideas, both by letter and by telegraph, than the amount paid in the same time to the railroads controlled by a single corporation of Pennsylvania for transporting persons and property.

With this hasty sketch of the growth of transportation, I pass to the second phase of my subject—a consideration of the transportation of property as at present conducted by railway.

The power to move property is still very limited, chiefly because of expense. Carriage by wagons on ordinary roads costs, in short distances, sums equalling the value at destination of the property moved. Carriage by railway or water is much cheaper, and the extent of possible movement correspondingly larger. For instance, five hundred pounds of dry goods can be

sent by rail hence to Philadelphia, ninety miles, over a railway never accused of charging too little, for one dollar and sixty cents. Upon the same goods the cartage for but five miles from the depot will be three dollars. Grain is now extensively forwarded by rail from the Mississippi River to the Atlantic seaboard. This is a comparatively new development in cheap transit, and secures a vaster market to multitudes of producers, and, to like multitudes of consumers, wider domains from which to draw supplies; but while light, valuable products will, even now, bear a still further carriage than this, many heavy, cheap ones will not until after cost shall have been lessened.

Three of the public requirements have been brought to a fair degree of perfection: safety, punctuality, and promptness. Injuries diminish annually in proportion to the total movement, while, in general, those occurring are more promptly paid for than ever before. Punctuality, over certain routes and under certain auspices, is becoming the rule, and the example is partially contagious, though it is to be regretted that the contagion is still under such perfect control in so many quarters. Promptness is likewise the rule with some transporters, especially with express companies and fast freight lines. The former make twice the speed of the latter, but at more than twice the cost. The latter, without adding to the public charges or seriously increasing the speed of freight-trains between stations, by each occupying, as one whole, long routes which would otherwise be but separately managed links; by abolishing transfer points, those powerful strictures upon rapidity of transit; by a supervision, directed from one head, which tracks each car from the commencement to the end of its journey, pressing it from any stoppage by prompt and urgent telegraphing, have combined with cheapness a promptitude that, five years since, would have commanded extravagant premiums. Then, an assurance of seven days between New York and Chicago readily sold for a high price; now seven days is much beyond the average time required, yet premiums are only historical.

The higher charges of the express companies as the warrant

for their greater speed confine their use to a limited tonnage. This fact suggests a broader one, namely, that while irregularity and punctuality may cost alike, rapid speeds cost more than slow ones; and, therefore, that the slowest speed permitted by commercial necessities is the wisest to adopt. This can be very slow if continuous, and the most effective plan yet offered for assuring its continuity is the exclusive assignment to freight-trains of a double track. The feature, however, most needing improvement is that of cost; and to it, and the various ways by which it may be increased or reduced, will be given consideration somewhat in detail.

The undertakings of transporters involve two sorts of expenditure: one, classed as Investments, includes the cost of all comparatively permanent facilities, such as the roadway or canal, rolling-stock, boats, or depots; while the other, designated as Expenses, covers all outlays for labor and material which are at once and palpably consumed in the daily service of transporting, or in maintaining the Investment property. Both sorts entail substantially like results on the public: if extravagant, it suffers; if otherwise, it gains.

All will admit that transporters' charges should suffice to pay necessary expenses, since their service must speedily cease if the outgo exceeds the income. Few will question the position that such charges should so far exceed expenses as to induce capital to provide the necessary investment property. This excess is ordinarily designated as a certain percentage on the investment account; a fixed interest on the borrowed portion, and dividends, fluctuating with prosperity, on the contributed part, which latter is represented by shares in the enterprise. Hence the item of expenses is the admitted measure of one part of the public tax, and the size of the investment account the admitted measure of the remainder. The public tacitly accepts these standards, but as yet has failed to prevent their expansion beyond equitable bounds.

Investment accounts amass with most amazing rapidity, and without corresponding increase of useful transportation facilities. Often they grow by the incompetency of constructors, who waste means through bungling locations, through extrava-

gant plans, and through slovenly or too costly work; often through bonuses, tenderly entitled discounts, but which simply express the price for which capitalists consent to suppress their real or professed doubts of an enterprise or its projectors. Sometimes investment accounts exceed correct limits, through providing transit capacity in excess of demand. But by far the most gigantic source of their recent accretions is the issuing of shares without full consideration.

Providing superabundant means of transportation is rare, and betokens simply ill judgment, and time may partly mitigate the evil results. This country has such boundless growth that few railways ultimately fail of full use. Still, there is the waste of long idle capital, and wasted capital helps none and hurts all. The difference of demand should therefore always have weight. A farming region, fairly timbered, thickly settled, and yielding varied crops, uses mostly what it makes, and makes mostly what it uses; hence it has little exchanging, and therefore little freight and few people to carry; for barterers make the bulk of travellers. A mining district, on the contrary, trades most of its products for most of what it uses. For the former, provision for a large or growing traffic would be expensive folly; for the latter and its markets, a wise and profitable outlay.

But if the third cause named be rare, the last is wonderfully the reverse. Shares flow out by millions for contracts or purchases in which other full consideration is given; for representations of real or nominal profits, which, if real, are in excess of fair dividends, and are invested in new property, that becomes in turn a source of further profit; the public thus both furnishing the provision and paying the transporter for the privilege. Shares are also largely issued for premiums, when, upon consolidation of several roadways into one, their respective investment accounts need equalization. This would be properly reached by giving to the joint investment account a nominal value equal to the proper cash value of the joint property. A precisely opposite course is usually adopted. That account which has the least value, which expresses the largest number of dollars beyond the dollars' worth of property owned, is selected as the

standard, and assumed to be worth what it calls for; and for all of the values which the others are agreed to have beyond this standard, additional shares are issued.

These are the leading pretexts upon which one of the bases for determining freight-rates is expanded. They have the sanction of usage, are not inherently wicked, unless, as a consequence, the innocent purchaser of original real, or newly inflated values is permitted to suffer, and are simply a very forcible expression of the fact that transporters, like other laborers, crave for their services all they can get, and will accept all the obliged public will pay.

The other standard of charge—the working expenses—is susceptible in many ways of growth and reduction. It is enlarged by incomplete use of the facilities provided. For example: the freight engines of a leading trunk line to the West ran, in 1868, over 6,000,000 miles; and assuming the proportions of transit in each direction to have been equal, then 161 tons of paying freight were moved each eastward, and 51 each westward mile; while the actual capacity per mile run of the standard freight engine averaged, over the entire road, 285 tons each way. Hence, of the track and engines provided, there was profitably employed only about 56 per cent. eastward and 18 per cent. westward. Trade-currents eastward always exceed those westward, and are apt to prevail most heavily when westward ones are lightest, and *vice versa*. Empty cars, therefore, abound each way. These evils are not wholly remediable, but the wasted expenditure falls as an extra charge upon the tons actually carried, and wisdom would counsel measures tending to reduce its extent. Well-devised inducements to commerce to diffuse trade-currents more equally throughout the year, and more nearly balance their volume in opposing directions, would be highly judicious. It should always be remembered that many items of expense are unchanged, whether a freight engine runs with full or partial load, and that it is vastly important, by all wise stimulants, to encourage the forwarding of freight in full trains of fully loaded cars.

Expenses are also increased by the dead weight hauled. According to the New York State Report of 1868, of the total

average weight of each freight train, 252 tons, but 106 tons, or 42 per cent., were lading. On the New York and Harlem road the proportion of lading was far less, being only 19 per cent. A ton of rolling stock and a ton of lading are moved for like cost. Increase the latter and diminish the former as far as practicable without detriment to the equipment, and the total number of tons which are to defray the gross cost being larger, the cost of each ton is necessarily smaller. This is a field in which inventive minds can profitably work.

Expenses are also increased by extravagance in management, arising sometimes from ignorance, sometimes from more unworthy causes; by delays to cars, which oblige increased investment in cars to accomplish a given work; by repudiation, or prolonged postponement of just damage claims, which causes an indirect expense to freight owners; by retaining expensive transfers which could be dispensed with, and by employing armies of solicitors for competitive traffic. Some parts of expenses can be diminished by consolidating more miles under a single control. Other classes of outgoes are, however, apt to be increased, leaving the gross expense unchanged.

Expenses are reduced when the volume of tonnage movement increases. This is, indeed, the fundamental condition of cheap transportation. The forwarding of one letter by special messenger across the continent would cost hundreds of dollars; but if sent by the Government mails only three pennies. The cheap service by the latter is possible because it simultaneously performs a like service for multitudes. Property movement is governed by the same law.

To exemplify, contrast certain operations in 1868 of two roads:

The New York and Harlem is 131 miles long. The Philadelphia and Reading, including its Harrisburg branch, is 147 miles long, and is mostly double tracked. The Harlem moved in the whole year 287,000 tons; the Reading, 3,600,000 tons of coal and 1,200,000 tons of merchandise. The Harlem moved 15,000,000 tons one mile; the Reading, 366,000,000 tons of coal and 45,000,000 tons of merchandise one mile. Note the financial results: On the Harlem the expense per ton per mile

was $5\frac{78}{100}$ cents, and on the Reading for coal $1\frac{8}{100}$ cents. The Harlem charged the public an average price per ton per mile of $7\frac{82}{100}$ cents, but the Reading on coal only $1\frac{74}{100}$ cents.

Expenses will not lessen in strict proportion to increase of tonnage. Only certain outgoes are independent of the volume moved, and are therefore reduced by the extent of business. It is also a fact that roadway repairs and like outlays cannot be accurately divided between passengers and freight, but the approximate division which all roads attempt may be taken as sufficiently correct for practical uses. In one of the above cases, certain expenses not divided by the company were assumed to be properly divisible in proportions similar to those which the company had already allotted.

Can any doubt the public's right of self-protection against heavy charges, imposed to meet undue expenses or exaggerated dividends? Transporters, like other sellers of service, have a right to seek the highest obtainable prices; the public, like other employers, has an equal right to buy at the lowest price that will not reduce quality. Against all charges beyond enough to secure efficient service they may rightfully guard; in fact, legislative regulation of rates is provided for in many existing charters. The question is, therefore, not one of right, but of method. The public's common organ, Government, might, it would seem, perform transport duty cheapest, but experience proves otherwise. No thoroughly protective method has yet been devised. In truth, the public has not fully realized its necessity, being a somewhat slow thinking and kindly hearted giant that cannot recognize an evil unless it be presented in a very simple and concrete form.

Securing honest and thoroughly scientific transporters to control its railways is one needful safeguard. I use the term "scientific transporter" comprehensively, as defining a master of the science in all of its leading phases, whether financial, constructive, operative, or commercial; one who is not simply acquainted with its fundamental principles, but has practised skill in their application.

Competition is much relied on for protection, but it has proved a broken reed. To provide a modern railway requires

such immense expenditure that the requisite means are difficult to secure, even for one road through a given district, and much more so for a second or third. Usually, additional lines, while they seek the same large centres of commerce, reach them through different districts. This confines their competition to the trade of such centres, while the traffic of the country peculiar to each line is not only uncompeted for, but subjected to an extra and often oppressive tax in order to restore the revenue depletions which each road suffers in its violent struggles with the others for jointly accessible business. The ability to burden, unjustly, uncompetitive or local trade supplies transporters with strength to wage prolonged contests for other tonnage at less than cost of transport. This wretched warfare, indirectly ruinous to the local business it overtaxes, is of little real benefit to the property battled for, as sooner or later truce is declared, and, if the truce becomes a permanent peace, competition ceases; while, if but a temporary measure, it is presently broken, but only to be renewed; if renewed, it is only to be broken again. Meanwhile, the tax on trade fluctuates with the shattering or maintenance of covenants, until commerce is harassed and dazed, and partially prostrated by its wild, illogical, ruinous changes.

The consolidation of railways has as a prime object the conversion of competitive into non-competitive or controlled traffic. It has, of course, other motives, is a natural movement, and may become a real progress. Governmental regulation of mutual rates and mutual interchange of facilities among roads might lessen this tendency.

The competitive idea, then, being necessarily of uncertain and limited application, nowhere of unquestioned benefit, and in the main illusory and pernicious, some better method for the mutual protection of both the public and transporters is needed; some plan which, by depriving transporters of extravagant local revenues, would divest them of power to inflict destructive fluctuations of prices on through trade, and consequent damage to their own interests. On this part of my subject I can likewise offer only general suggestions.

The proper cash value at any given time of any given rail

way, having equitable regard to its cost to existing owners, is a fair measure for its profits, which should be a large enough percentage of that assumed value to attract capital. A proper allowance for expenses, assuming the road to be well managed and possessed of a given trade, would, added to the profits, give the gross revenue needed from the road to produce just financial results. This revenue, so far as it was to be earned from property carriage, would be properly divisible among the various tons moved, so as to assign to each its due share of those expenses which do, and those which do not, vary with distance, of those which vary per ton with the quantity moved at one time or at regular intervals, and of those springing from the minor differences of value, of risk, and of compactness. Roadways thus limited in their rates of charge, protected from the capricious competition of foolish rivals, and with all increase of their investment accounts confined to amounts which represented actual, wisely expended, additional cash outlays, and obliged to provide enough means of transport always to perform their duty efficiently, would better serve the country and their owners than any are now doing.

Such regulations must be sufficiently flexible to suit changing circumstances; must embrace the whole country; be enacted and enforced by Government, and executed by a patient, painstaking, upright, incorruptible body of experts, headed by their best member. State action has been frequently sought, but never effectively obtained, and justly so; for every State measure proposed has not only been wretchedly crude and imbecile in all but purpose, but, in the absence of co-operative State action, must infallibly have driven to other routes, in unrestricting States, all competitive traffic which possessed a choice. The National Government, leading the States, is, in this matter, apparently the only source of public safety.

It must not be forgotten that transportation, though simply a service and intangible, is yet a manufacture, evolved, like other manufactures, from the whole or partial consumption of labor and material, and, therefore, at a cost measured by the current values of the labor and material consumed. It cannot

be furnished gratis without loss. The tons which pay, shoulder the expense of those which do not. Crude notions upon this point exist both with transporters and the public which better training will destroy. Wild cries go up at intervals for cheaper carriage, and this public clamor, stung into being by wrong for which no sure remedy is visible, always finds charlatans in power, ready with vain pledges and boastful words. But the public needs to learn that it must always pay a fair price if it would command permanent and faithful service, and that it never commits greater folly nor more successfully courts financial suffering, than when it credits and honors the impostors who promise it good service for less than a just cost.

The suggestions here given are not offered in a dogmatic spirit. Their reduction to practice would doubtless reveal many needs for modification. They are believed, however, to indicate a practical mode for reducing and equalizing cost to the joint benefit of transporters and their patrons. To mature them into a working code would require much time, a careful collection and digestion of data, and a prudent testing, by actual use, of each radical conclusion. For such undertakings persons beset by the daily exigencies of business would not have leisure. They could only be well performed by the governmental body proposed.

It would have been proper, in connection with this branch of the subject, to have discussed possible improvements in the existing working organizations of long lines; the economic relations of fast freight and express companies to the public and to the roads which employ them, and also several other points of much interest; but the necessary confinement of this paper to ordinary limits excludes their consideration. Turning from the present to the future, and briefly glancing into that dreamland of possibilities wherein all our existing great achievements once dwelt, permit me to indicate goals towards which discoverers will continually press.

Consider Track Capacity. No railway in this country has as yet moved in any one year over five millions (5,000,000) of tons of paying freight. If a double-track road were exclusively devoted, for sixteen out of each twenty-four working hours, to

continuously moving freight trains each way, thus leaving one-third of the time for road repairs; if these trains were always free from delays by accident, for fuel, for water, or from any cause; if each train consisted of sixty eight-wheeled freight-cars, pulled by a sufficient number of engines; if the average speed adopted was seven and a half miles per hour; if the intervals for the sake of safety between the passage of the rear of one and the head of the next following train were maintained at five minutes each; and if terminal facilities and trade were sufficient, so that each train of cars should be fully loaded both ways, and each car-load of lading average ten tons; then, under these circumstances, there would pass, in both directions, in the working days of one year, a total of forty-five millions (45,000,000) of tons of paying freight. None of these conditions are clearly impossible, unless those of the large, steady volumes, and of the equality of opposing currents of trade, be so; and it would be too venturesome to declare them permanently beyond reach in all regions.

Consider Power. Steam for freight movement is ordinarily used at a pressure of one hundred to one hundred and ten pounds per square inch. That product in steam-boilers which explodes excites a far greater force. Gunpowder has produced a pressure of over 45,000, and nitro-glycerine over 200,000 pounds per square inch, while the astounding force exerted in the propulsion of the heavenly bodies exceeds rational conception. The power we have utilized compares poorly with existing forces yet beyond our mastery.

Consider Speed. The average motion through water, of our best vessels, will not equal twenty miles per hour. On railways we have reached sixty, but it is justly viewed as a costly, dangerous, and unwise speed to adopt with our present transportation devices. Birds have made long-continued flights at an ascertained speed of ninety miles per hour. A Pacific tidal wave last year rushed between widely parted shores with an estimated velocity of four hundred miles per hour. Cannon-balls have an initial velocity in some cases of nearly two thousand. Our earth around its axis has about half as much, and through its orbit 68,000 miles per hour.

Consider a reduction of the effects of gravitation and friction. The air is a fluid in which frictional resistance is slight. It extends far above the highest undulations of the earth, and obviates all need of gradation or track, the two large items which swell the cost of permanent investments. When a controllable power is found, of sufficiently great strength, in sufficiently small compass, means to apply it will be speedily devised, and regular, punctual Air Navigation become an accomplished fact. Should we discover a subtler fluid than air or water, cheap, susceptible of accessible confinement in long, narrow tracks, independent of harm from dust, wet, heat, or cold, conferring, by attraction, a high degree of adhesion upon the motive machinery, and, by limited repulsion upon the carriages, neutralizing most effects of gravitation, friction, and wear, what may we not attain to in speed, safety, and economy? Wheels could be dispensed with, and with them would vanish some of our chief sources of dead-weight, risk, and expense; and a silent, gliding motion would succeed the present rude, danger-hinting clatter.

Some of these speculations may scarcely seem now deserving to rank as possibilities. But since the recent past has given useful shape to as apparently wild thoughts of still earlier days, he would be a bold man who should put them all down as impracticable fancies. That vast improvements upon our present methods of transport are possible, I firmly believe; that we shall ever harness to our service all of the mighty forces and swift speeds which we know exist in nature, I do not venture to hope.

JOSEPH D. POTTS.

VACCINATION.

A REPORT READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 27, 1869.

At the instance of the General Committee of the Department of Health of this Association, a committee of three was constituted, last summer, to consider the subject of Vaccination.

The members of the committee thus formed are, Dr. D. F. Lincoln, of Boston; Professor William A. Hammond, of this city; and myself. The paper which I now have the honor to present is substantially, in a somewhat abbreviated form, the Report of that Committee. The labor of preparing this Report devolved upon Dr. Lincoln, but the views stated are the unanimous conclusions of the Committee.

The facts presented are generally not new, and most of them are probably familiar to many now present. The aim of the Committee has been to present, in an accessible and intelligible form for popular use, the essential truths relating to vaccination, and to offer some suggestions for its more universal and efficient performance in this country.

In opening this subject, a few words about the small-pox will not be out of place. Terrible as is this disease, its danger is little likely to be appreciated by us, living at a time when its ravages have been so much restricted. Other pestilences affect the imagination more strongly. Around the plague there gathers a cloud of oriental mystery, of mediæval and chivalrous romance, of historic incident and personality. The yellow-fever is a rare visitor; the cholera is only occasionally with us; both are foreigners, and to both is attached somewhat of the respect due to guests from beyond sea. But the small-pox presents neither interest nor terrors for us. It is nothing more than an excessively disagreeable complaint, affecting only careless and vulgar persons, and occasionally

carrying off some who are little missed. It is forgotten that the small-pox is as dangerous to the community as either the plague, the yellow-fever, or the cholera. At the time of its prevalence, it were no hard bargain to have exchanged it for either of the other diseases. If ever the practice of vaccination falls into disrepute, we shall have a new pestilence among us, destroying yearly from three to six thousand persons in and about New York. And any one of us who allows himself to remain unprotected will do well to reflect that he practically exposes himself to the infection of a disease which destroys from one-fifth to one-half of those it attacks. The severity with which small-pox has attacked our savage tribes is well known. They seem peculiarly open to the destructive influence of the white man's plagues. This is, however, not alone true of the disease under consideration, for the typhus or ship-fever has at times not simply decimated but destroyed whole tribes of Indians, leaving their white neighbors almost unharmed.

There is no doubt that the small-pox has existed in China, and probably, also, in Hindostan, from a very remote antiquity. It appeared in Egypt and Arabia about the middle of the sixth century, and was carried into Europe by the conquering Mussulmans. As the disease came from the East, so did the invention of inoculation. The Chinese have long been in the habit of implanting the disease, with a view to preventing the more disastrous effects which follow it when acquired accidentally. They "sow" the crusts in the nostrils of the person to be inoculated; or they powder them, and, mingling them with aromatic substances, make a snuff, of which the person takes a pinch. The Hindoos inoculated by the prick of a needle dipped in variolous pus. Thus, both these nations have come into the possession of a principle which really lies at the foundation of the modern practice of vaccination, namely: that a mild form of the disease will preserve from a second attack, just as surely as a severe form. By artificial implantation the small-pox poison is introduced into the system, and, once for all, the susceptibility of the system to small-pox is excited and exhausted. How this takes place is not under-

stood. But vaccination will do the very same thing, as far as the essential is concerned; that is, it will exhaust the capacity of the system for having the small-pox.

The cow-pox is not a contagious disease, like the inoculated small-pox, yet there is good reason for believing that the cow-pox, whether in man or in the lower animals, is really the small-pox, deprived of its virulence and its capacity for transmission through the air.* If ever theory was proved by fact, this has been; for actual inoculation of cows with small-pox matter has been frequently resorted to, with the effect of generating the cow-pox pure and simple. Moreover, lymph from the cow-pox thus produced has been used in vaccinating tens of thousands of children, and has proved perfectly satisfactory in every respect, acting precisely like lymph from the spontaneous cow-pox, and furnishing efficient protection against the small-pox. As a rule, cow-pox can only be had once by the same person.

There are several eruptions, to which cows, horses, and some other animals are subject, which resemble the genuine cow-pox; such as in horses the "grease," once erroneously thought to be the origin of the disease in cows. Genuine horse-pox furnishes the means for successful inoculation, like genuine cow-pox, and is equally protective.

Inoculation for the small-pox, to which we just now alluded, was introduced into England by Lady Mary Wortley Montagu. Accompanying her husband to Constantinople, whither he was sent on a mission from the British Government, she found that it was the fashion there to convey small-pox in a mild form to children, by pricking them with needles dipped in the variolous pus. Greatly struck with the value of the operation, as well as its apparent mildness, she determined upon bringing it into use. To this end she took the most efficient means in her power, by causing her infant son to be inoculated, and subsequently, upon her return to England, her daugh-

* This statement needs a little correction; for, while it is notoriously impossible for one child to "catch" the cow-pox from another, it is at least probable that it is sometimes communicated from one cow to another without actual contact.

ter also. This took place in 1721. But, though her example was followed by many of the nobility, and even by the royal family, the practice never became anything like universal. The danger was too apparent. In 1721, Dr. Boylston inoculated 244 of the inhabitants of Boston, New England, with a mortality of six; and this, being about one in sixty, was the usual rate. Great improvements were afterwards made in the operation by using only one puncture instead of several, restricting the patients' diet, and allowing them to go about freely in the open air. But, unfortunately, the disease could be taken as easily from any one of these inoculated persons as from one having the natural small-pox. The result of this artificial dissemination of small-pox through the community was that, in the last part of the eighteenth century, one-fourth more deaths occurred from small-pox, in proportion to the population, than in the first part. By an act of the British Parliament, passed in 1841, it was made a penal offence to inoculate the small-pox. The same prohibition stands in the statutes of several of our own States.

To Dr. Edward Jenner is due the credit, we may almost say, of abolishing this disease in Christendom. By no lucky accident did he come into possession of the secret of vaccination. He did not actually discover that the blisters upon the udders of the Gloucestershire cows contained a preservative against small-pox. A belief in this protective power had for many years been current among the milkers and the illiterate peasants of his neighborhood. Jenner, however, did more than discover; he *proved*. From the time when the subject first awakened his interest until the day of his triumphant success, he was laughed at by his brethren in the profession as a dreamer; his idea was voted a mere hobby, and his enthusiasm a bore. He expended six thousand pounds in money, and the labor of many years, in the furtherance of his investigations, and, when completed, he published them without reserve or stipulation.

His first work was entitled "An Enquiry into the Causes and Effects of the Variolæ Vaccinæ," and appeared in 1798. More recent investigations have, almost without exception,

confirmed Jenner's propositions; and his descriptions remain unexcelled.

The cow-pox takes best, and shows best, in young children. When some of the lymph is implanted under the skin, the puncture shows no sign of anything unusual for a day or two; then it reddens, a pimple forms, and on the pimple a little blister, which may be plainly seen on the fifth or sixth day. On the eighth day the blister (vesicle) is plump, round, translucent, pearly white, with a clearly marked edge, and a depression in the centre; the skin around it, for half an inch or so, is red and swollen. Jenner compared it to "the section of a pearl upon a rose-leaf." *This vesicle*, and, still more, the *circle of inflammation around it* (called areola), *are the two points which prove the vaccination to be successful.* The vesicle is most perfect on the eighth day (that is, the day-week after the operation); the areola, on the day or two following. The vesicle dries up in a few days more, and a crust forms, which falls off from the twentieth to the twenty-fifth day. The scar or pit left behind is the best proof of successful vaccination, when we cannot see the process itself. It should be round or oval, rather sunken, and dotted at the bottom with little pits; sometimes radiated. If several vesicles run together, the mark will of course be less circular. A slight rash usually comes upon the child's body about the eighth day, and lasts perhaps a week; he may be a little feverish, or may remain quite well.

If matter direct from the cow is used in vaccination, the process is apt to be retarded, and the result less certain. But perfectly "good" vaccinations may require a day or two longer than the time here given. Poor or spurious cow-pox is apt to run a too rapid course; sometimes the whole process is gone through in eight or ten days, leaving a scar hardly visible, and wholly worthless for the purpose of protection.

If the child has an eruption on the skin, vaccination must be put off till that is cured; otherwise he probably "will not take." He ought to be in good health in other respects, if possible.

Infants catch the small-pox at least as readily as adults, and

the rate of mortality among them is proportionably high. A single fact, stated upon the highest English authority, will serve at once to illustrate this point, and to fix it in the memory. In the year 1863, an unusually severe epidemic of small-pox raged in London. Of the children who died—and who constitute a large majority of the entire mortality—"*seven-eighths* (⅞) might have been saved, if all had been vaccinated before the age of two months." Good judges consider the operation safe at the age of four or six weeks. It is certainly not too much to say that, even in remote country districts, the period of vaccination ought not to be postponed beyond the sixth month.

When a person has taken small-pox, the disease remains latent until the twelfth day (inclusive). Then he becomes feverish; and after two days more the rash appears. Vaccination, on the other hand, requires only nine or ten days to reach its perfection; and, if performed within two days of the time when infection occurred, it will have time to form its areola—the true characteristic of perfect vaccination—before the fever commences. If performed later, its course is commonly interrupted as soon as the fever appears, and the operation is partially or wholly unsuccessful. For example, let us suppose that a man visits a friend's house on Monday. On Tuesday, he discovers that there was a person sick with small-pox in that house. He has never been vaccinated, or, rather, as is often the case, he was only nominally vaccinated. He goes on Wednesday, therefore, and has the operation properly performed two days after contagion has occurred. If successful, the vesicle is perfect on the next Wednesday, and the areola on Thursday, and the man is protected; but, if the operation had not been performed, the small-pox would have begun on Friday. And, if he were vaccinated even three days after contagion, the small-pox would appear, though in a modified form; but, if four days, the disease would not be hindered or modified at all. Nevertheless, it is well to vaccinate in almost all cases of supposed contagion.

In vaccinating from the cow or from a child, lymph ought not to be taken from any but a perfect vesicle. No blood

must be mingled with it. The lymph is best taken on the day-week of the vaccination, but may be drawn sooner; if later, it is of very uncertain quality. The centre of the vesicle is lightly punctured with a lancet, and the fluid oozes out. The point of the instrument, which, for this method, must be very sharp, is dipped into the fluid, and plunged under the skin of the child to be vaccinated. This is repeated in four or six different places. If a little blood is drawn in inserting the lancet, this is of no consequence at all; let it remain and dry on. Some prefer to scrape the skin lightly, or to score it with the lancet-point, and then rub the lymph upon the place thus prepared.

If care is taken, only one case in one hundred and fifty will fail in skilful hands. But most physicians find it inconvenient to vaccinate "from arm to arm," and therefore use points of ivory or quill, dipped in the vaccine lymph and dried; others take a bit of the scab—powdered and dissolved in glycerine or water—to insert, instead of fresh lymph. These methods, however, are far less certain than that first described. Many physicians fail once in three or four times; and it is very much to be regretted that so many are content with imperfect results. *For, when a person is once vaccinated, though poorly, it becomes difficult or impossible to vaccinate him properly.* Nevertheless, if the first result is unsatisfactory, let the trial be repeated as soon as convenient, and as often as may be required until a satisfactory result is attained. There are a very few persons who, from unknown causes, seem to be unsusceptible; but upon some subsequent trial the system may receive what it first refused.

The lymph direct from the cow sometimes occasions troublesome, even dangerous, inflammation and fever. It does not produce any better vesicles than those from humanized lymph, and it is much harder to make it take.

A thorough vaccination protects the system against small-pox as surely as an attack of the disease itself would. Some persons have small-pox twice; and some have it after a thorough vaccination; but a person who is not protected by the vaccination would not be protected by having had the

disease itself. Such was Jenner's belief, founded upon the view that cow-pox is but a variation of small-pox; and statistics, as far as they go, point in the same direction.

Thorough vaccination, in the modern sense of the term, implies the possession of four or more good cicatrices or marks. With this number of marks, the chance of taking small-pox is very small indeed; and, if taken, it will be in so mild a form as to be hardly an object of dread to the patient. The following statistics will fully justify these positions. The first series refers to upwards of 50,000 children, examined in London by Drs. Buchanan and Seaton, in 1863. Of those children who had no marks of vaccination, 360 in every 1,000 had scars of small-pox, or more than one-third; while, of those bearing marks of vaccination, only 1·78 in 1,000 had such traces. And by separating those vaccinated into classes, the following results were obtained:

Of those having					
One vaccine cicatrix,	6·80	per 1000	had	marks	of small-pox.
Two vaccine cicatrices,	2·49	"	"	"	"
Three " "	1·42	"	"	"	"
Four or more "	0·67	"	"	"	"
Of those having mark or					
marks of *bad quality*,	7·60	"	"	"	"
tolerable "	2·35	"	"	"	"
excellent "	1·22	"	"	"	"
One mark of *bad quality*	19·00	"	"	"	"

So much for the degrees of protection afforded by different degrees of vaccination. As for those who take small-pox after vaccination, the following table will show how vastly greater the chance of recovery is for them than for the unvaccinated. It is based upon 15,000 cases, observed and treated by Mr. Marson in the London Small-pox Hospital.

Classification of patients affected with small pox.	Number of deaths per cent. in each class respectively.
1. Unvaccinated, ...	37·00
2. Stated to have been vaccinated, but having no cicatrix,	23·57

Classification of patients affected with small-pox.	Number of deaths per cent. in each class respectively.
3. Vaccinated:	
a. Having one vaccine cicatrix . . .	7·73
b. " two vaccine cicatrices . . .	4·70
c. " three " " . . .	1·95
d. " four or more vaccine cicatrices .	0·55
α. Having well-marked cicatrices . . .	2·52
β. Having badly marked cicatrices . . .	8·82
4. Having previously had small-pox	19·00

This shows the likelihood of death to well-vaccinated persons with small-pox to be one-fourteenth of that to which badly vaccinated persons are exposed. These two tables amply justify the statement that it is very desirable to have multiple vaccine cicatrices if possible.

No one will deny the immense benefit which has resulted in the aggregate protection afforded to nations and armies. In England, at the close of the last century, there died annually of small-pox 3,000 persons to every million of population; while from 1841 to 1853, the average was 304; from 1854 to 1863, 171. In many Continental countries and cities, the results have been even more striking than this. In Sweden, the annual small-pox death-rate was 2,050 in a million; reduced, during the period from 1810 to 1850, to 158; in Westphalia, 2,643 deaths, reduced in a similar period to 114; in Bohemia, Moravia, and Austrian Silesia, from 4,000 to 200; in Copenhagen, from 3,128 to 286; and in Berlin, from 3,422 to 176.

Since the year 1853, vaccination has been, to a certain extent, compulsory in England. In that year an act was passed, known as Lord Lyttleton's Vaccination Act, "to extend and make compulsory the practice of vaccination." By this act penalties were provided for the refusal to allow a child to be vaccinated. But, as no special officer was appointed to see to the enforcement of the law, it had very little practical result. The unsatisfactory working of the act led to the promulgation of an order of the Privy Council, under date of

December 1, 1859, for the improvement of public vaccination. By this order, a system of inspection was directed to be instituted, with reference especially to the operation of vaccination, and its efficiency in unions where the amount of infant vaccinations, compared with the number of births, appeared to be especially low. These systematic inspections have been so useful in promoting vaccinations that their lordships propose to continue them throughout all the unions of England.

Revaccination is now generally considered desirable in every case, when the period of puberty is past; say, at sixteen or eighteen years of age. This operation, even when successful, seldom produces the effect of a first vaccination. The resulting cow-pox reaches its height about the fifth or sixth day, and a scab forms on the eighth. It resembles, in short, the result of a spurious vaccination, with hasty and imperfectly formed vesicles.

In the Würtemberg army in 1831–5, and the British army in 1861, several thousand soldiers were revaccinated. The curious result was attained that, in those who bore marks of small-pox, as well as those previously vaccinated, more than half the vaccinations succeeded.

In the Prussian army revaccination has been performed upon every recruit since 1833; the result being that the annual deaths from small-pox (which at one time previously were 104) have not averaged more than 2.

In the Bavarian army revaccination has been compulsory since 1843. From that date till 1857, not even a single case of unmodified small-pox occurred, nor a single death from small-pox.

Similar good results have followed the institution of revaccination in the armies of Great Britain, Denmark, Sweden, and Baden.

Supposed Evil Consequences of Vaccination.—It is hardly necessary to allude to the extravagances of the first opponents of the operation. It was stigmatized as impious; the subjects of it would, it was said, become impregnated with all imaginable diseases and characteristics of the bovine genus; they would low like kine, and their foreheads would sprout with

horns. Some, in later years, have tried to trace all the physical evils that plague modern society to the root of vaccination. Modern medicine has been charged, to a certain extent justly, with rescuing a multitude of weaklings, who, under a healthy barbarism, would have died young—"as they ought"!—while as things are now constituted they survive to adult age, trailing about discouraged souls in tired bodies, and transmitting to weakly children an incompetent vitality. But it needs only a moment's reflection to show that small-pox kills the strongest as well as the weakest. We cannot spare its victims. They are a substantial loss to the community. It is also said that those who would else have died of small-pox, now die of some other disease that has taken its place. In the sense intended, this is simply untrue. The rate of mortality in London, for example, is but three-quarters of what it was a century ago, exclusive of small-pox. Thus, while the general risk of death is one-fourth less, that from small-pox is almost extinguished.

There is a vague feeling among the community at large, and even among physicians, that vaccination now and then transmits a constitutional disease. "Is it possible, doctor, that my child can have taken scrofula from a scrofulous child through vaccination?" Without declaring that such a thing is absolutely impossible, we may safely say that it is a great deal easier for the child to have taken it from its own parents. It would seem impossible—judging from all known analogy—to communicate any disease besides the cow-pox from a properly formed vaccine vesicle. To illustrate this principle, it may suffice to say that the small-pox, most contagious of all diseases, cannot be communicated in this way. A person may be vaccinated just before the small-pox breaks out upon him, and he may have a good vaccine vesicle; but another person vaccinated from this vesicle will have cow-pox, and nothing more.

In England, probably thirty millions of vaccinations have been performed during the present century. With what evil results? Marson, who has performed over 50,000 vaccinations, "has never seen other diseases communicated with the vac-

cine disease, nor does he believe in the popular reports that they are so communicated." Leese, with an experience scarcely less extensive, agrees with Marson. Dr. West, who has treated, during seventeen years, 26,000 infants and children, is of the same view. Professor Paget, speaking from a large experience, says: "Now, vaccination, . . . though I believe it very rarely does, . . . by disturbing the general health, may give opportunity for the external manifestation and complete evolution of some constitutional affection, which but for it might have remained rather longer latent." "This is the worst thing," he says, "that can with any show of reason be charged against vaccination; even this can very seldom be charged with truth." That is to say, a child with a "humor in the blood" will be apt to have the humor "break out" whenever the system is irritated, whether by vaccination, by teething, or by bad diet.

It is forgotten, and most unjustly, by those who decry vaccination, that the bugbear scrofula was once a real danger of most threatening import to those who survived the small-pox. In constitutions predisposed to scrofula or to consumption, we find that small-pox used to be one of the most frequent causes of the development of these diseases; deafness was also a frequent result; and as for blindness, it is stated by Sir Gilbert Blane that, during the latter half of the last century, two-thirds of the applicants for relief at the Hospital of the Indigent Blind owed their loss of sight to small-pox. The practical conclusion is strongly put by Dr. Seaton in a single sentence: "The 56,000 lives, which at the least are now, on an average, saved annually from small-pox in England alone, are not gained without here and there a child getting erysipelas from its vaccination, and even, in cases of excessive rarity, dying of it; but what reasonable man ever hesitates on account of this risk to have his child vaccinated?" Let us, then, throw all possible safeguards around the operation of vaccination; let it be a punishable offence to perform it badly; but let us not venture to compare the evils of cow-pox with those of small-pox. Ignorance and recklessness have made vaccination a pest, not a blessing, to a few unfortunates. But malpractice in the per-

formance of an operation proves not the danger of operating, but the incompetence of the operator.

It remains a contested point how far the vaccine virus loses its efficacy by transmission through many series of human subjects. Dr. Seaton, Medical Inspector to the Privy Council, believes that the deterioration is due to carelessness on the part of operators, who frequently select lymph that has passed the suitable period, or lymph from imperfect vesicles or from adults. He says: "It is in truth not to the cow, but to adequate care and skill on the part of vaccinators in the selection of the children and vesicles from which lymph is taken, that we must look for maintaining stocks of active lymph." And, without venturing to discuss further this question, surely it is pertinent to suggest that, if Mr. Marson can produce "typical vesicles," as well-formed as those produced by Jenner, from humanized lymph, and meets with entire failure only once in 150 cases, there must be some reason besides degeneration of lymph for the great frequency of failure and partial failure in other hands. If the number of people whom vaccination fails to protect is steadily increasing, it is worth while to consider whether this is not due to increasing neglect of precautions in performing the operation; and, especially, to the use of lymph which does not present the recognized marks of goodness.

Another source of fallacy may be indicated: How do we know that vaccinations are becoming less efficacious? This is inferred chiefly from the great number of instances in which revaccination is successful. But does this success prove that the individuals concerned were liable to an attack of small-pox? We think not. We just now quoted the instances of the armies of Great Britain and Würtemberg. Here several thousand men were revaccinated, and the operation was about as successful upon those who had had the small-pox as upon those who had only been vaccinated previously. In a very large number—about one-third of each class—the revaccination was completely successful. This shows merely that a protected person—one not liable to take small-pox—can sometimes be revaccinated with success.

In Boston, vaccination is performed gratuitously upon large numbers of children by persons in the employ of the government of that city. The same is done in New York by the Public Dispensaries. This service is performed most thoroughly and satisfactorily, by gentlemen who have the confidence of their professional brethren. In fact, physicians are in the habit of frequently resorting to the public vaccinators to renew their own supplies of lymph. During the late war, great quantities of lymph were put up in capillary glass tubes at the New York Central Dispensary, and distributed to the surgeons in the United States service. The lymph thus stored is nearly as effective as that taken directly from the arm, and seems not to deteriorate by keeping.

Here, then, is an actual nucleus for a system of public vaccination. It seems impracticable in this country to attempt, as the English are doing, to enforce vaccination upon everybody, under penalty of fine and imprisonment. But there is much to be done in the way of increasing the facility with which vaccination can be performed. In the first place, the public ought to be satisfied that the men appointed by the State are more likely to do their work thoroughly than are the average of private practitioners. This is really the great and essential point; for upon it will depend the success of Government commissions of enquiry, or any other measures that may be taken. Can the medical profession be expected to support a system which will take away a certain portion of their practice? Very likely, yes; for the operation is to many a troublesome one, and is not paid in proportion to the loss of time it involves. Cannot, then, the Governments of States, or the General Government, be induced to take the simple step of offering vaccination gratuitously to all, under guarantees of purity, such as the public would confide in? The following measures are here suggested in a very general way:

I. A "Bureau of Vaccination," to be established by the General Government, with its own chief, and a corps of subordinates responsible to him. The duties of the bureau should consist in supplying lymph in sealed glass tubes to any physi-

cian or sea-captain, within the United States, making application for the same; in accumulating and investigating evidence relating to vaccination; and in conferring with such commissions from the States as might desire information or aid.

II. Commissions of Enquiry, to be appointed by the several States.

III. Provision for free public vaccination, also by individual States, upon a scale embracing the whole community. Every country, town, and settlement should be visited as often as once in six months; and every family in large cities should be notified at stated times that vaccination will be performed gratuitously, if desired.

It will be seen that the value of the measures proposed depends entirely upon the character of the officers appointed to carry them into effect. This cannot be otherwise. No legislation can be worth a farthing without competent executive authorities. Able and faithful men can, doubtless, be found, willing to devote themselves to this important work; and it is not difficult to see that such men, vested with competent powers, will effect most valuable improvements in the condition of vaccination in this country.

In concluding, a brief account of the English laws respecting vaccination, and their practical working, may be in place. The statements made are derived from the annual Reports of the Medical Officer of the Privy Council.

The "National Vaccine Establishment" (formerly "Institution") was founded by Act of Parliament, in 1808. Though at first its scope included the investigation of scientific questions connected with vaccination, its functions have for many years past been practically restricted to maintaining for general use, and distributing as wanted, a supply of trustworthy lymph; for which object it supports a number of stations where gratuitous vaccination is extensively performed. The supply from the establishment is supplemented by that from a number of other stations, in several of the largest towns.

In 1840, an act of Parliament was passed, providing that vaccination at the public cost might be claimed by the local authorities of any parish of England and Wales. By a second act, it was provided that gratuitous vaccination should not place its recipient in the position of persons receiving public relief. By a third act, in 1853, it was made obligatory on parents and guardians that every child, its health permitting, should be vaccinated within three months from birth; or, if an orphan, within four months; and penalties were made recoverable from parents or guardians neglecting to fulfil this obligation. In 1861, the law put into the hands of guardians of the poor the power of prosecuting violations of this law, at the public expense.

Under the Poor Laws, the whole of England and Wales is divided into districts, called Unions. The authorities, to whom the care of the poor in the several unions is committed, make contracts with medical men for the performance of vaccination. The minimum of compensation is fixed by law at 1*s.* 6*d.* *per caput.* But provision was made by Parliament, a few years since, to pay gratuities, not exceeding 1*s.* for each child vaccinated, in addition to the fees contracted for. In order to distribute these gratuities equitably, a biennial inspection of the whole of the kingdom has been established, by which the character of each operator's work is estimated. Those whose results appear the best receive the full sum of 1*s.* per vaccination; those of the next degree of excellence, 8*d.*; and a great many are found not worthy of any gratuity.

These arrangements for vaccination are in force throughout the whole of England and Wales; and the great mass of the population tends to avail itself of them, in order to comply with the law which makes infant vaccination compulsory. It is estimated by good authority that from two-thirds to three-fourths of all children born are vaccinated by the public vaccinators.

Supervision and inspection, by gentlemen of high professional standing, have formed, for the past twelve years, a very important part of the work of the Privy Council in reference to vaccination. In the words of Dr. Sanderson, one of the In-

spectors, "Arrangements in themselves have but little effect in extending the practice of vaccination, unless they are combined with measures of supervision; and supervision without arrangement is more effectual than arrangement without supervision."

Owing to the frequency of careless and incompetent vaccinators, the Privy Council issued an order, to take effect January 1, 1860, that every person thus contracted with must have, besides the ordinary qualifications necessary for a district medical officer, also a special certificate of instruction or examination in the practice of vaccination, given by some public vaccinator whom the Privy Council authorize to act for the purpose. The requirements of instruction include six weeks' attendance at some one of the educational stations. The necessity of this regulation appears from the statement of Mr. Marson, whose experience in the Small-pox Hospital has satisfied him that "vaccination is, as a rule, much better performed abroad than in England." A very large portion of the population is stated to be vaccinated imperfectly; which is attributed to the absence, in former times, of an authorized standard of vaccination, such as the Privy Council is now endeavoring to establish. Full and explicit instructions for vaccinating under contract have been issued, upon which it is unnecessary to dwell. It is reported, for the year 1867, that 142,107 charges of lymph were distributed by the National Vaccine Establishment. Most of these were upon ivory points; about 8,000 were in capillary tubes, and a small number upon bits of glass. They were supplied by twenty-one stations, situated in London and some of the larger towns; of which thirteen are used as educational institutions for physicians wishing to be qualified as public vaccinators. These stations are inspected yearly, both in reference to the stock of lymph and to their educational business.

In general, the laws requiring vaccination have been far from attaining complete success. In some places almost every child born is vaccinated, either by the public officer or by private practitioners; but in others the Inspectors have had to report a scandalous neglect in the performance of vaccina-

tion, in spite of the law. Yet, even when prosecutions were not actually made, the existence of the law was a great help in effecting public readiness to have children vaccinated. In many places the people, almost without exception, would have their children vaccinated if strongly urged by the proper authorities, even without recourse being had to the enforcement of the law.

The medical man who contracts with local authorities for the performance of vaccination agrees to be present at a specified place, on a given day or days, the hours being sometimes stated, sometimes not. Among the most frequent causes of the imperfect performance of vaccination has been not a deficiency in the number of operators (as might at first be supposed), but the reverse condition. The subdivision into districts has been carried to such an extreme as to form one of the greatest impediments to proper vaccination. A very large number of the contractors cannot pretend to fulfil the conditions imposed upon them. For example, in a district where only fifty births occur yearly, it is preposterous to require attendance twice a week at the station. Properly to fulfil the duties of his position, the vaccinator ought to be sure of the presence of ten new cases, on an average, every week. With this *average*, there will be weeks when on the appointed day only four or five are presented at his office. If the number fell lower still, it might easily happen that there would be no child from whom it would be quite desirable to vaccinate the new-comers. The vaccinator would then be reduced to the alternative either to use preserved lymph or to vaccinate directly from an inferior arm; and to this latter practice is ascribed a great amount of poor vaccination. When, therefore, the annual number of births falls much short of five hundred, as is the case in most rural districts, it is recommended that semi-annual visits be made, at which the whole infant population may be vaccinated at three or four sessions on successive weeks. A small town should be visited once a quarter; a large town, weekly.

Other causes of the partial failure of the law have been the following:

Absence of suitable provision for serving notices upon parents and guardians, and for prosecuting delinquents;

Low rate of payments to contractors;

On the part of the contractors, negligence; use of stored lymph instead of fresh; allowing their duties to be performed by deputy; want of skill for the operation, a deficiency which may exist in men who otherwise are excellent practitioners;

Objections of the poor. These usually resolved themselves into an unwillingness to take trouble. But in some places the parents caused great annoyance to the operators by refusing to allow lymph to be taken from their children's arms.

The question of the advantages and dangers of vaccination is still kept before the British public by the occasional refusal of some person to allow a child to be vaccinated, followed by the payment of the legal penalty for such contumacy. Within a year or two a society has originated in London, having for its object to discourage vaccination by appeals to popular ignorance and prejudice; but the thoroughly unscientific character of the most of those who oppose vaccination renders it unnecessary in this report to do more than allude to their efforts. The law is there pressed to an extent to which it would be quite impossible to force it here. For direct compulsion we must find some substitute; and hitherto there has been no single measure devised, of more efficiency in securing general vaccination, than the requirement which is now made in several of our States, that public-school children shall show evidences of vaccination. But the question of measures proper to be adopted has been elsewhere discussed.

FRANCIS BACON,
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THE ELECTION OF PRESIDENTS.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 27, 1869.

A PAPER on the "Protection of the Ballot" was read before the American Social Science Association, at its meeting at Albany, on the 19th of February, 1869, and was subsequently printed in the Journal of the Society. In it the following query was suggested:

"What good reason can be given why (in our Presidential elections) we should vote for one man, or thirty men, who, in turn, are to be pledged to vote for another man, designated to them beforehand, instead of voting directly for the object of our choice? . . . Can any good reason be suggested why the people of this country should not directly vote for their Presidents as they ever have for their Governors?"

This question did not have long to wait for a conclusive answer. When advanced, it was accompanied with the remark that the subject stood rather "in need of suggestion and discussion than of patent legislative panaceas or individual dogmatism." In this spirit it was responded to by the press. Among others, a very able criticism shortly afterwards appeared in the editorial columns of the Chicago *Tribune*, which, while emphatically condemning the present mode of choosing the Electoral Colleges, pointed out very clearly how greater dangers might not improbably be found to exist in the election of President by direct popular vote, than by the method now in use. This reply to the question, if sustained by reason and fact, is conclusive, and shows that no relief is to be found in the direction indicated.

In the previous paper on this subject,* it was very broadly stated that the present system of choosing the Electoral Colleges, on a general ticket in each State, acts as nothing more

* Journal of Social Science, No. I., June, 1869, pp. 93–100.

nor less than a premium on fraud; making the violation of the ballot by one party in one locality an alleged "political necessity" for a counterbalancing violation of it by another party in another locality. Particular sections of the country—those in which an election is close and hotly contested—are, by the practical working of this system, regularly pointed out at every election as the decisive points, so that the least astute politician knows beforehand just where votes will be wanted and just where they will be useless. He can, therefore, work intelligently, and, indeed, almost exactly; adapting his means to his ends. For instance, in the last Presidential election, unless fraud were counteracted by fraud, it was apparent to every one that the manufacture of a few thousand votes in New York City would decide the thirty-three electoral votes of the State. This would exactly counteract, in the grand result, any possible majority, the other way, of the legal votes cast in Illinois, Massachusetts, and Vermont, where the election was practically uncontested. New York City was, therefore, designated beforehand as a decisive point; a place where every fraudulent vote would carry great fictitious weight. The result of the election showed that the same state of affairs existed elsewhere. Votes in Kansas were of no value in face of a majority of 17,030; 164 ballots, fraudulent or legal, settled the result in Oregon, and negatived that in the State first named. It was argued in the previous paper that it was futile to hope for any purity in elections while the elections actually revealed such enormous disparities of influence; as long as the system at once supplied such a great incentive to fraud, and designated so precisely the localities in which it could be committed. The case of the election of 1844 was cited. There can be no doubt that Mr. Polk received a majority of the legal votes cast in that election; there is strong reason for believing, however, that Mr. Clay was the legally elected President. The result, then, turned on the vote of New York, whose Electoral College numbered thirty-six members. The party which supported Mr. Polk carried the day; but a subsequent investigation by the Judiciary Committee of the United States Senate abundantly proved the perpetration of extensive frauds in that

State, which, not impossibly, decided the contest. (Sen. Docs., 28th Cong., 2d Sess., Rep. No. 173.)

It is useless and wicked to argue that, in this as in other cases, fraud was probably offset by fraud, and that the result practically reflected the will of the legal majority. Allowing this to be true in fact, it settles the question as to that system which establishes, for any portion of its citizens, cheating as the only alternative to defeat. It certainly is not conducive to public morality that fraud should be recognized as a regular element in politics; indeed, it would be far better to resort to force at once. The suggestion, however, is not true in fact. As is well known, the perpetration of frauds on a large scale is possible only under certain circumstances. They can be effected in great cities, where the inhabitants are necessarily unknown to each other; or in rude and lawless communities. Our annals are, unfortunately, replete with precedents coming under either head. Similar outrages, however, are not, nor can they be, perpetrated, on any large scale, by a party which only controls well-regulated and moderately populated sections of country.

It only remains to solve the problem of how this fraud can be reduced within the narrowest limits. The present system puts the largest possible premium upon it; for, under it, one fraudulent vote, in a given locality, always may, and often does, outweigh a hundred legal votes across an imaginary line which divides States. To remedy this, it was proposed to abolish the system of Electoral Colleges altogether. It was suggested that, if the President was elected by direct popular vote, as the Governors of the States now are, and always have been, the effect of illegal voting would, at least, be reduced to natural limits. A few or a great many fraudulent votes in one State could, at most, only counterbalance an exactly equal number of honest votes elsewhere; and not, as at present, by choosing the whole Electoral College of one large State, offset, with absolute disregard of numbers, vast popular majorities in three other and smaller States. The predominance given to fraud is certainly unnecessary, in so far as it is artificial.

It cannot, however, be denied, as argued in the columns of the Chicago *Tribune*, that such a system would be cumbrous and liable to great dangers whenever elections were closely contested. Even the citizens of New York, accustomed as they are to not dissimilar spectacles within their own borders, might object to seeing vast opposing majorities rolling up from the wilds of Texas. The early history of Kansas, and the later histories of some Southern States, have demonstrated to us the possible voting capacity of certain descriptions of sparsely settled country. It must be conceded that it would not be safe to permit any closely contested election—as the election of 1844, for instance, which was decided by a popular majority of only 30,000 out of a total vote of 2,600,000—to depend on the manufactured returns of lawless communities. Two points in the discussion may therefore be considered as settled: the present system stands condemned, and demands instant reform; and, secondly, the system of general, direct election would prove no satisfactory substitute for it. What other solution of the problem can be suggested?

While few deny the importance of this question, no one seems resolved to insist on its consideration and settlement. The lessons of the past are thus forgotten before they are thoroughly learned. One year has now passed since the election of 1868 took place. During that time associations of individuals, courts of law, and committees of Congress have been busily engaged in investigating the violations of the ballot then alleged to have taken place. The perpetration of frauds in that election—frauds unprecedented, systematic, appalling—frauds of which the recognized leaders of both parties, the judges of courts of law, and the inspectors of elections must have been cognizant, and in which they were sometimes proved to have participated—all these have ceased to be subjects of mere partisan clamor, and are established as matters of record. Courts have passed upon them, and have declared certified results vitiated by fraud. Committees have investigated them, and presented the fruits of their labors in the form of ponderous reports. In what has it all resulted? Any one who chooses may now satisfy himself that in Philadelphia four

imported ruffians threw sixty votes in one day, as part of a regular system of "repeating." It is matter of record that one single judge, between October 8 and October 23, 1868, ordered to be issued a daily average of over 718 certificates of citizenship. Honest and experienced magistrates, who have for years been engaged in executing the naturalization laws, have testified that not more than a single set of papers could be properly passed in five minutes; whence it follows that, allowing the energetic magistrate in question to have worked night and day, without one moment of intermission, between the 8th and 23d of October, he could not have properly accomplished more than one-half part of what he did accomplish in fact. Before another judge, engaged in the performance of a similar farce, the same man appeared, as a witness under oath, twenty-five times, under different names, in a single evening. It is not disputed that, in one case, thirty-five persons were registered, and twenty-three actually voted, from the house of a member of the general committee of a party, in which only one voter actually resided; in another case, thirty persons were registered, and twenty-two voted, from the house of a State senator, in which only three voters resided; in yet two other cases, forty-five persons were registered, and thirty-six voted, from the houses of two aldermen, whence four votes only could legally have come; from yet another house, one hundred and fifty-two names were registered, representing, if legal, a population of seven hundred souls under a single roof. Under these circumstances, it not unnaturally followed that the actual vote polled in the city, where these events took place, was 108 per cent. of its legal voters, as indicated by the census returns. Finally, right or wrong, the country has settled down into a conviction, which, in truth, is not unsustained by evidence, that many thousand illegal votes were cast at the last Presidential election within the limits of a single State. All this, be it remembered, was done, simply because our system made each illegal ballot bear not upon one or upon three electoral votes, but upon those of a whole college. In each particular locality where these frauds were perpetrated, the election was wholly uncontested; had the influence of these manufactured voters

been confined within narrow limits, no inducement to fraud would have existed, because fraud would have been unavailing. The system made the opportunity, and it did not pass unimproved.

We cannot go on indefinitely in this way. We escaped a contested election during the war of the rebellion only, as it were, by a miracle. The last election was accompanied with loud threats of violence and resistance in case a shadow of doubt rested on its validity; and yet, with that optimism which is so marked a characteristic of the American people, the nation goes on its course, apparently neither learning from the past nor fearing for the future. This good fortune cannot last for ever. Every one now appreciates, and cannot but dread, the terrific and ever-increasing strain which each succeeding Presidential election imposes on our Government. This periodical revolution, for such it amounts to now, is at once the safety-valve and the weakest point in our system. Its regular recurrence does, indeed, relieve us of all apprehension of any other or more violent change of rulers; but, on the other hand, the prize at stake is becoming so enormous, and political morality so loose, that it is greatly to be feared lest the declared result of the ballot will not much longer command the public respect. Too much attention, too much discussion, cannot be given to this subject. If the problem were satisfactorily solved; if the ballot could be guarded, and the possible effect of fraud reduced to a minimum; if the country could be assured that by no possibility could any man ever be cheated into the Executive chair, then, indeed, would the Presidential election be robbed of its dangers, and it would remain as the feature in our system which contributed most to its strength. Any other form of revolution would then become as improbable as it would be unnecessary. How this can be effected is the question now under discussion. How can the influence of the fraudulent ballot be restricted within the narrowest possible limits?

If the existing system accomplishes a result the reverse of that desired; if the end in view would not be attained by abandoning the indirectness of the present system and resort-

ing to an election by the direct plurality vote—then there is but a single other alternative, and we are brought directly to the electoral system conducted by districts. This method of arriving at the result cannot be better described than in the article from the Chicago *Tribune* already referred to:

"The whole people of each State will vote directly for President and Vice-President, and whoever receives the majority of the popular vote of the State will have the two electoral votes which now correspond to its two senators; and the people of each congressional district, as such, will vote directly for President and Vice-President, and a candidate receiving a majority of the votes of the district will have the electoral vote which corresponds to the district representative in Congress. This is simply a change from a State electoral ticket to a district electoral ticket. Like the plan of an election by a general direct vote, it would not lessen the influence of the great party conventions over the nominations. The people would still vote mainly in two great phalanxes, representing the progressive and conservative alternatives on the leading question of public policy. It would lessen very greatly the present possibility that the result might not agree with the popular vote. But above all, it would confine the effect of fraudulent voting in any one district to three electoral votes, viz., the two cast by the State at large, and the one cast by the district in which the fraud arose. The 27 000 fraudulent votes cast in the city of New York at the last election could only affect about eight electoral votes in all, instead of thirty-three, and practically would not have been resorted to to secure these, as they were safe to the Democratic party without fraud. It is only in districts where but one party has power that any considerable degree of fraudulent voting can be done. A strong opposition will always prevent it. In such districts there would be no contest, and no temptation to fraud, if their majority did not counteract other majorities belonging to outside districts. Hence, under the plan last proposed, not only would the inducement to fraud almost wholly disappear, but the violent rancor and heat of politics in those districts which are all one way would disappear also."

Herein, it is believed, will be found a satisfactory solution of the difficulty. It will confine the effects of fraud within the narrowest possible limits, and, practically, render it unavailing. Neither is it a novelty in our system, as it was practised in many of the States during the earlier Presidential elections, and was continued in Maryland down to the year 1833. It recognizes also the compromises of the Constitution, and, by securing to the smaller States their two senatorial votes, obviates the danger of their opposing the reform.

How can the proposed change be effected? The clause of the Constitution which confers the regulation of the subject on the Legislatures of the several States effectually stands in the way of all Congressional action of a final nature. It is futile to hope for any reform from the action of individual States, for it would be Quixotic for any one or more States of the Union to divide their own influence in Presidential elections so long as neighboring States insist on preserving theirs intact. The only remedy, therefore, lies in a uniform adoption of the system for all the States alike, through the slow process of amending the Federal Constitution. This instrument has been manipulated in so many respects of late, that there is now a strong and rapidly growing disposition to leave it alone for the present. This is an additional obstacle which must be overcome. As usual, in all cases which touch merely on the general good—in which no material interest is concerned—it is most difficult to bring party organizations to bear upon the work. Were this not so, the existing method of choosing the Electoral Colleges would long ago have been swept away, for neither this discussion nor the measure of reform suggested has in it anything of novelty. Hamilton early directed his attention to it. President Jackson in six consecutive messages discussed the subject, and recommended the election of Presidents by direct popular vote. Mr. Benton kept the matter almost continually before the Senate during his thirty years of service in that body. President Johnson, Senators Wade, Sumner, and Buckalew, and various members of the House have all with equal emphasis condemned the existing system. During the year just past, an amendment looking to its reform was introduced into the Senate by Mr. Morton, passed that body, and then—went to its long rest. Now, however, the matter is pressed upon the public attention from new considerations. It is no longer, as in the days of Jackson, a mere question of theory, but one of practical and vital importance. The present system has now been reduced in the sight of all men to a machinery for the encouragement and development of the most dangerous of all forms of political fraud. Those who have investigated the subject have

arrived at the same practical measure of reform. It has been quoted from the columns of the Chicago *Tribune;* it can be found reduced to the form of a constitutional amendment in the report of Mr. Lawrence, of Ohio, to the last House of Representatives.

This has, then, been a commonplace of lifeless discussion almost from time immemorial. What can be done to make it a subject for action?—to forward its adoption? Politicians, caucuses, and conventions cannot be relied on in this matter. This measure seeks to remove, not to create, a fountain of corruption. It carries with it no political interest, no claim on patronage, no spoils of victory. It is simply a measure suggested by common sense and common honesty for the common good. It is in the interest of all, and not of a faction.

The student of social science seeks ever to prevent crime, not by repression, but by removing the hidden inducement to crime. He will seek to protect the ballot by removing, in so far as he can, all inducement to commit frauds through the ballot. He will not pass laws to punish fraudulent voting, if he can prevent fraudulent voting by rendering it useless. If there is, then, any public field in which the labors of this Association can be made useful, if there is any political function it can fulfil, it is in putting its shoulder to the wheel in aid of a work of reform like this, as necessary as it is thankless. Somebody must do it. A machinery in the State, apart from all party organizations, aloof from all politics, is greatly needed to keep public attention continually awake to such subjects as this, or the kindred measure of Civil Service reform. To this work the Social Science Association proposes more especially to devote itself, and, to the end that it may efficiently do so, it asks the support and encouragement of all who, wishing well to their country, do not themselves render it that individual service which they feel is its due.

I would now respectfully suggest that this Association do memorialize Congress on the subject I have had the honor of discussing.

CHARLES FRANCIS ADAMS, Jr.

After the reading of this paper was finished, it was moved by Mr. James M. Barnard, as follows:

Resolved, That the officers of this Association be, and hereby are, instructed to prepare a memorial to the Congress of the United States, in relation to the immediate passage by it, and the submission to the Legislatures of the several States, with a view to its adoption into the Federal Constitution, of the amendment to that instrument recommended at the close of Report No. 31, House Documents, 3d Session, 40th Congress.

Which motion, having been duly seconded, was put to the vote of the Association, and passed in the affirmative, *nem. con.*

In pursuance of the above vote, the following memorial was subsequently prepared and presented:

MEMORIAL

Addressed to the Congress of the United States by the American Association for the Advancement of Social Science, in relation to the choice of Electors of President and Vice-President of the United States.

The American Social Science Association would respectfully represent to your Honorable Bodies:

That, by Section 1, of Article II., of the Constitution of the United States, it is provided that the choice of Electors of the President and Vice-President of the United States shall be made in such manner as the Legislatures of the several States may direct;

That, as a consequence of said provision, it has become, and must remain what is known as a "political necessity," that each of the several States should, with a view to the preservation of its whole relative political weight to other States, choose such Electors as a unit, and without any regard to the divisions of opinion existing among its citizens;

That, owing to the settlement of new regions and the rapid growth of large cities in the United States, new and very tempting opportunities are offered for the perpetration of fraud in elections, instances of which have been notorious and are established as of record, through the investigations of Committees of your Honorable Bodies.

Your petitioners would further represent, that the choice of the Electoral Colleges as a unit, by popular vote in the several States, holds forth peculiar temptation, and affords especial facilities for the successful perpetration of such frauds, from the fact that they may, when perpetrated in large cities or in sparsely settled and lawless districts, be made to decide the vote of whole States, represented even by thirty or more electoral votes;

That this anomaly in our system obviously increases the danger of an election of the Federal Executive by fraud, and holds forth alarming inducements to violations of the purity of the ballot in all Presidential elections;

Therefore, your Honorable Bodies are respectfully petitioned to pass, and cause to be submitted to the Legislatures of the several States for adoption, an amendment to the Federal Constitution, providing for the choice of Electors of the President and Vice-President in the manner hereinafter set forth; to the end that frauds perpetrated in any particular localities shall only affect individual electoral votes, instead of the vote of whole colleges; that thereby the inducement to frauds through the ballot in Presidential elections, on a large scale, may be withheld, as the accumulation of large fraudulent majorities in any given locality cannot then affect the general results produced by the votes of other localities in the same State; and to the further end that a premium may no longer exist, as now, upon fraudulent voting at each Presidential election, which renders the apprehension of fraud to be committed by one party, in one locality, both an inducement and an excuse for the perpetration of similar and counterbalancing frauds by the opposing party in other localities.

Your petitioners would, therefore, respectfully commend to the attention of your Honorable Bodies, as calculated to remedy the evils and remove the dangers arising from the present constitutional provisions on this subject, the following amendment to the Constitution, prepared by one of the Committees of the House of Representatives of the Fortieth Congress (Report No. 31, House Doc., 40th Congress, 3d Session):

ARTICLE —.

"The Electors of President and Vice-President shall be chosen as follows:

"Two Electors of President and Vice-President shall be chosen at large from each State by the qualified voters therein.

"A number of Electors in each State, equal to the whole number of representatives to which such State may be entitled in Congress, shall be chosen in single districts of contiguous and compact territory, each containing, as nearly as practicable, an equal amount of population.

"The times, places, and manner of choosing such Electors shall be prescribed in each State by the Legislature thereof, but Congress may at any time, by law, revoke or alter such regulations.

"Congress shall prescribe the mode of determining the validity of the choice of Electors, and of contesting the right to the office of President and Vice-President."

LIFE INSURANCE.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 28, 1869.

Life insurance has increased so rapidly in the United States during the last few years that it has now become one of our most important economies. A few words in regard to its relation to social science, its claims to public confidence, its growth, present position, and future prospects, may, perhaps, be of interest to the members of this Association.

Life insurance is essentially a *social* economy. It has, indeed, been sometimes adduced as a measure of the social advancement and condition of a people. Be that as it may, it may safely be said that it can only flourish in an advanced civilization. Depending, more than does any other human transaction, upon *confidence*, and that to extend necessarily for many years in the future, generally, indeed, until death matures the contract of its existence, it is at once a proof of the confidence of the people in the stability of their government, and in their own commercial integrity. Its growth and present position in the United States are two of the most astonishing facts in this age of wonderful developments. May that growth never be checked, or that confidence abated by the want of stability in our government, or the want of integrity among those entrusted with the management of our institutions!

Depending upon the heaven-born precept to bear each other's burdens, life insurance is the most successful application of the principle by which compensation for the misfortune of an individual, arising from the happening of a contingency or contingencies, to which every one is liable, may be effectually made by spreading the burden over the many—the share of each one being very small in proportion to the total compensation. This principle is susceptible of almost infinite applica-

tion, success in almost every case being dependent upon the proper observance of the laws of probability.

Life insurance has for its basis the laws governing the duration of human life or the chances of living or dying during a given period, combined with the improvement of money by interest. A competent knowledge of these laws is essential to its successful prosecution and development. While nothing is more uncertain than the duration of life in the case of an individual, yet nothing can be predicted in future with more certainty than the duration of life or the rates of mortality in a sufficiently large number of cases. The census returns of different countries, and the facts observed in regard to deaths among insured lives, odd-fellows, etc., enable us to base our estimates as to the rates of mortality among a given number of persons at each age, with all the confidence and precision resulting from the application of mathematical principles to the laws of nature. While the census returns of different nations are of great value as scientific facts and bases of comparison, yet, for the purposes of life insurance, the mortality experience of insured lives is the safest and best guide. Persons whose lives are insured are generally males in moderate circumstances, belonging to what may be termed the provident class of the community. The rates of mortality among such persons will always be different from those observed in a miscellaneous community of males and females in all classes and conditions of life. Our most reliable tables are those based upon actual experience, among which are those deduced from the experience of seventeen British companies, published in 1843, and known as the "Actuaries' or Combined Experience Table of Mortality," from the experience of twenty of the largest British companies published in 1869, known as the "*New* Actuaries' Table," and, in this country, that deduced chiefly from the experience of our largest American company. The labors of the Insurance Commissioners of Massachusetts, showing the rates of mortality for several years in all companies transacting business in that commonwealth, have resulted in valuable additions to our knowledge, while the English Life Tables, Nos. 1, 2, and 3, deduced by Dr. Farr from

he census returns of England and Wales for 1841, 1851, and 1861 respectively, afford ample material for comparisons of the relative mortality among assured lives, and among persons of similar ages in a miscellaneous community. The results of these and similar investigations develop some very interesting facts in regard to the relative mortality at different ages and in different sections of the country. It is shown, for instance, that the mortality among American assured lives is less than that among persons of similar ages in any other country or class, as far as known. This is owing in great measure to the fact that a large proportion of these lives have but recently passed a successful medical examination; but it is also a fact that the *vitality* at middle ages, say from thirty to sixty, is undoubtedly greater among Americans than among persons of similar ages and circumstances in any other country. On the other hand, we must anticipate excessive mortality at the older ages, and our life tables are constructed with special reference to this point.

A very remarkable example of the effect of *human will*, although exercised unconsciously, perhaps, has been developed by the experience of our life companies. This is in the selection by the individual from among the different kinds of policies issued by the company These are in general for a short term of years, for the whole life, or where the insurance is payable on the attainment of a given age or at death if prior. The first would naturally be selected by such persons as had some reason to fear that they would die before the close of the term of years (and which reason might not be discernible by the keenest medical examiner); the second would naturally be selected by persons who had no reason to believe that death would occur sooner or later than the average, but who, knowing that death must occur, desire to make provision for their families. The third class would, on account of the increased premium, be chosen only by those persons who had some reason to think that they would live to enjoy the money. As a result, in our largest American company, we find that the annual mortality among holders of

Endowment Assurance Policies has been	. .	·40	per cent.
Whole Life " "	. .	·99	"
Short Term " "	. .	1·78	"

These facts show the necessity of a careful study of the results of experience among insured lives, and as this is being done every year in our best companies, we may confidently expect constant additions to our knowledge of the laws governing the duration of life in such classes.

By assuming rates of mortality higher than those which will, in all probability, be experienced, and a rate of interest (generally 4 per cent.) less than that which may be anticipated in future under the most unfavorable circumstances, and by the addition of a margin to the net premiums so deduced, in order to guard against adverse contingencies, and to provide for necessary expenses, it may be justly claimed for our life companies that their business is based upon the sure foundation of science and experience; and that so long as their teachings are properly observed we may agree, with an eminent English authority, that "there is nothing in the commercial world which approaches, even remotely, to the security afforded by a well-organized and prudently managed insurance company."

If the conservative assumptions in regard to interest, mortality, and margins, either or all, are higher than those found to have been necessary by experience in any year or years, surplus or savings will result, which should be returned in equitable proportions to the policy-holders.

The one thing needful in life insurance, so far at least as the public is concerned, is that the accumulations, or *reserves*, as they are technically called, shown by the laws of mortality and interest to be necessary, are in possession by the company, and in reality set aside and properly invested. It is to be hoped that each company has in its own employ a person competent to determine by the application of these laws the amount of reserve necessary to be laid aside each year with respect to each policy. But we have an additional safeguard in the

several State officials appointed to watch over the interests of policy-holders. To the Hon. Elizur Wright, first Insurance Commissioner of Massachusetts, belongs the honor of devising and inaugurating a plan by which the contingent liabilities of any company may be accurately determined. This has been done for eleven consecutive years by Mr. Wright, and by his successor, Hon. John E. Sanford, the present able Commissioner, in the case of every company transacting business in that Commonwealth. The basis of valuation in Massachusetts is the Actuaries' table of mortality and 4 per cent. interest. In New York, the basis is a table deduced chiefly from the experience of our largest American company, in which the effects of recent selection are eliminated, and 4½ per cent. interest. It is to be regretted that the bases of valuation in the two States should not be the same, as in that case the resulting valuations would be a check the one on the other, and render unnecessary the expense and labor attending additional valuations by sister States. Having an accurate valuation of the contingent liabilities of a company, it is only necessary to compare the same with the assets to determine its condition. A detailed list of assets and liabilities under outstanding policies of each company is given side by side every year by the Insurance Commissioner of Massachusetts, and will hereafter be given by the Superintendent at Albany, in the New York report, so that any one may form an intelligent opinion in regard to the condition of each company. Of course, the character as well as the amount of assets should be carefully considered. Unless the returns are incorrectly or fraudulently made, these statements can be relied upon; and it will be impossible for a bankrupt life company to escape detection and exposure, and thus the great evils and disasters resulting from such disgraceful failures as have lately been seen in England will be prevented.

The following table, taken from the last report of the Massachusetts Insurance Commissioner, will show the progress and present condition of the life companies transacting business in that Commonwealth:

GROWTH OF BUSINESS.

Year.	No. of Companies.	No. of Policies out-standing.	Increase.	Amount Insured.	Increase.
1858	14	42,502	.....	$116,482,196 00	.....
1859	16	48,607	6,105	132,740,828 00	$16,258,632 00
1860	19	55,360	6,753	151,321,230 00	18,580,402 00
1861	19	57,139	1,779	152,937,587 00	1,616,357 00
1862	24	75,892	18,753	199,285,862 00	46,348,275 00
1863	25	97,943	22,051	259,725,190 00	60,439,328 00
1864	27	146,562	48,619	382,569,890 00	122,844,700 00
1865	32	211,537	64,975	563,396,862 00	180,826,972 00
1866	43	310,738	99,201	871,863,925 00	308,467,053 00
1867	47	432,441	121,703	1,234,630,474 00	362,766,549 00
1868	56	548,280	115,839	1,566,901,509 00	332,271,035 00

FINANCIAL GROWTH.

Year.	Income.	Total Assets.	Computed Premium Reserve.	Claims by Death.
1858	$4,835,886 00	$17,446,455 00	$10,672,000 00	.....
1859	4,839,877 00	18,556,857 00	12,037,853 00	$1,197,583 00
1860	5,635,071 00	21,963,438 00	13,695,381 00	1,225,998 00
1861	6,126,100 00	25,099,556 00	14,731,845 00	1,501,542 00
1862	7,770,056 00	31,675,984 00	18,494,607 00	2,023,671 00
1863	10,389,968 00	36,034,126 00	24,021,295 00	2,369,140 00
1864	16,164,604 00	45,460,595 00	30,870,534 00	3,281,470 00
1865	24,758,282 00	60,939,772 00	42,526,623 00	4,347,277 00
1866	41,377,104 00	88,666,232 00	65,031,991 00	5,353,141 00
1867	62,513,378 00	130,485,501 00	100,230,047 00	9,287,545 00
1868	77,279,145 00	175,554,426 00	140,190,288 00	11,475,837 00

In speaking of the valuation of policies, as shown in the above tables, Mr. Sanford, the Commissioner, states, in his last report:

"This work, which now embraces the calculation of the reserve in detail upon over half a million of policies, outstanding in fifty-six different companies, has been brought up to the close of the year 1868. Notwithstanding the variety and magnitude of the labor involved, making its personal supervision anything but a sinecure, and leaving much less opportunity than could be desired for other investigations, we are

justified in saying that the work has been done throughout with systematic and thorough care, and with a patience and fidelity on the part of our assistants for which we cannot feel too grateful. The liability to error where many figures are involved, experienced not only in our own work, but frequently detected in the data furnished by companies whose usual carefulness is highly to be commended, should make us distrustful of attaining absolute accuracy, and oblige us to be content with the hope that no blunders have occurred affecting the substantial correctness of the results."

It cannot be claimed that life insurance is without defects; on the contrary, its defects are many and grievous; but they are, in the United States, at least, chiefly such as are incident to youth and wonderful growth, and are, in general, on the surface.

We may well turn from these defects to what has been called the magnificent well-doing of life insurance, and no one can doubt that it has done, and is now doing, an immense good among our people. Many a dying man has been consoled by the reflection that his family are provided for; and many a sufferer on the bed of sickness has been comforted by the remembrance of his own careful foresight. There is no reason why life insurance, in one form or other, shorn of present defects, and with improvements suggested by science and experience, should not absorb a large percentage of the surplus earnings of our whole people; on the contrary, there is every reason that it will be the case, and that with advantage to the participants. An English authority, in an article in the *Journal of the Institute of Actuaries*, for July, 1868, speaking of the wonderful progress of life insurance in the United States, as evinced by the statistics of one of the most prominent companies, states:

"One reflection is forced on us by what has preceded: How long will it be before the insurance tide, which has so long set westward, shall be rolled back on our own shores? When it comes, if it should come, how shall we be able to withstand it? We can do nothing for our policy-holders that will bear a moment's comparison with the results which this company has

accomplished, and, we cannot doubt, will continue for many years to come to accomplish for them. At present, we are safe in the merited distrust which hangs about the public credit of the country. But old stains, if not renewed, will assuredly be worn out with time. Let its public credit be once established beyond reach of doubt or cavil, and America must become the savings-bank of Europe, and certainly not least so in respect of such savings as take the form of assurance premiums."

SHEPPARD HOMANS.

THE ADMINISTRATION OF CRIMINAL JUSTICE.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 28, 1869.

This is a topic upon which, in common with that of the administration of civil justice, the public mind to-day is greatly agitated. It is claimed, with what justice it is not the province of this paper to deal, that the present administration of criminal justice is feeble and lax, and a remedy is anxiously sought. The agitation is useful, for certainly there is no question of graver importance to society, and none upon the just determination of which the stability of our institutions and the very existence of the social fabric more directly depend. Such a subject, with its numerous branches and details, demands elaborate treatment, and the purpose of this paper will have been accomplished in offering food for speculation and discussion. It is proposed, therefore, to consider very briefly and generally, first, the cause of the alleged laxity in the execution of the existing criminal law; second, to suggest some changes in detail; and, third, to outline a proposed fundamental change in the governing spirit of the system. First, then, with respect to the laxity of administration. Here at the very root there lies the misfortune of a dependent judiciary. The election of judges at brief intervals clearly stands in the way of a firm, thorough, and adequate administration of any kind of justice. The system has been tried and found wanting. It is certainly not adapted to our present human nature. Its tendency is to weaken and pull down the strong, while that of a life tenure is to strengthen and uphold the weak. It is not sufficient, then, for the thinker to point out existing defects, to develop plans of reform, or to originate any general system, juster in principle, more lucid and harmonious in detail, than the present, so long as the agents are wanting to execute and give it practical effect. The remedy is with the people. When they are prepared for the life tenure, whether

by appointment or election it matters little, with large and ample salaries, they will have firm and independent public servants, free from feverish unrest, tranquil, and contented, and with no incentive to any other, certainly to no lower, ambition than the acquisition of an honorable reputation as able and upright jurists.

Passing from this main difficulty, acknowledging that it stands in the way of the full and effective administration of any system, conceding in effect the weakness of the motive power, it is still worthy of consideration whether something may not meantime be done for the improvement of the machinery. There are undoubtedly defects of detail, errors, both of commission and omission, which of themselves lead to grave abuses, and yet may readily be corrected. Prominent among these are:

1. The detention of witnesses.
2. The laxity of appeal in the State courts.
3. The inadequacy of appeal in the Federal courts.
4. The paid jury system in the Federal courts.
5. The unanimity required of the Petit Jury.
6. The Grand Jury.

First, with respect to the detention of witnesses. If a respectable citizen has the misfortune to witness a brawl between two ruffians, resulting in bloodshed, he may be compelled to furnish bail for his appearance as a witness or go to jail. The result is that not unfrequently the decent witness suffers imprisonment, while the culprit goes at large upon bail. Thus, instead of encouraging witnesses to come forward and aid the administration of justice, the law practically affixes a penalty to disinterested zeal for the public safety and welfare. Indeed, it has come to be considered dangerous to witness an affray in our streets. There is the immediate danger incurred in rendering assistance to the weak, coupled with the agreeable prospect of being locked up for one's pains, and finally, perhaps, of being threatened with death upon the way to the witness stand by the prisoner and his confederates. Is it wonder-

ful, under such circumstances, that good Samaritans are rare, and that the prudent citizen makes a hasty escape from anything which looks like crime? The remedy will be considered in another connection. Next, as to the laxity of appeal in the State courts. A writ of error lies in the first instance to the Supreme Court sitting *in banc*. From thence an appeal to the Court of Appeals. The hearing in the Supreme Court might with profit be dispensed with. It adds to the expense and delay, without binding either the State or the prisoner. If the conviction be affirmed, the prisoner appeals. If a new trial be awarded him, the people appeal, and the decision is not unfrequently reversed and the original conviction affirmed. Attention is meantime diverted from the crime, the prisoner and his enormities are forgotten, and the public faith in certain and speedy justice becomes weakened. One direct appeal to the court of last resort would be all-sufficient, and the English system of requiring an *ex-parte* application for a *rule nisi* against a new trial would stop frivolous appeals. The redundance of appeal in the State is only equalled by the inadequacy of appeal in the Federal courts. There the prisoner is tried in the Circuit, and it is there that his motion in arrest of judgment or for a new trial is heard. The same officer who presides at *nisi prius* alone constitutes the tribunal *in banc*. It is assumed, perhaps by those of strong faith believed, that the moment he takes his seat in the latter capacity he becomes transfigured into a kind of high appellate being, wholly disconnected from his lower *nisi prius* self, and that his human nature is left below. He is asked to reverse himself, to take back his opinions, to acknowledge his errors. It need scarcely be added that swift law is meted out to the offender, and that no complaint has ever yet been made of justice being frustrated by the frequency of new trials. Then, the prisoner is tried by a paid petit jury. The panel is small, with a *per diem* of two dollars each, and that whether the juror's time is occupied or not. The twelve who are actually impanelled of course more than earn their compensation. But the remainder may go about their business. Thus, in a small way, personal interest is fostered. There are those who would seek such a

position. It becomes, in its fashion, a kind of office, and not wholly undesirable to men whose avocations are of such a character as not to be seriously interfered with by an occasional sitting. The tendency of human nature is to lean, sometimes unconsciously it is true, towards even a government which has small favors to bestow, to continue, or to take away with pleasure. In the State courts, the juror's fees are merely nominal.

Note the difference between interest and duty. The former ensures an ample attendance. Under the latter *régime*, business frequently comes to a stand-still, and jurors have to be almost dragged to their seats. But better, far better, to suffer all the inconveniences resulting from neglect and apathy, terms synonymous with want of interest, and an almost ensured impartiality, rather than permit the lightest feather of interest to warp the judgment, or a single breath of prejudice to be breathed in the direction of the conscience.

Next, the unanimity required of the petit jury. In civil matters, this is a positive absurdity and a flagrant abuse. Yet it is retained for no better reason than that, like many other errors and follies, it was handed down to us from our ancestors. A two-thirds vote decides an impeachment; a majority vote, a question of law; but a fact is only established by unanimity, and that, too, upon the part of twelve men, generally strangers to one another, and drawn indiscriminately from the community at large. In criminal cases, it may be said that a man should only be convicted upon proof so clear as to be convincing to every mind; but when it is considered with what difficulty twelve minds are brought to concur upon any question, and when allowance is made for caprice, eccentricity, passion, prejudices, and friendships, that idea is practically satisfied in requiring a three-fourths vote to convict.

Last, the Grand Jury. This body was formerly supposed to be one of the bulwarks of liberty. If so, its day is surely past; for it has come to be regarded as a mere adjunct to public prosecutors, a cumbersome machine for the grinding out of questionable indictments, a vast political power, and, in bad or unscrupulous hands, an engine of oppression, wrong, and out-

rage. Witness the spectacle, neither impossible nor unfrequent, of a grand jury in secret session in one room, a petit jury impanelled in another, a public prosecutor hovering over the two, and perhaps influencing both; citizens indicted by the one, and brought to trial upon short notice before the other. All this with or without the incident of but a single appeal to the judge who tries them. Here is a spectacle with the action of which angels might perhaps be trusted; but, where common mortals alone appear upon the scene, fraught with danger to our liberties, and subversive of our dearest rights. There is a just antipathy to secret tribunals, or irresponsible bodies sitting in the dark. No man should be put upon his trial without a preliminary hearing, and an opportunity of cross-examining the prosecutor's witnesses. Then let the magistrate determine, after a fair and open investigation, whether there is a reasonable ground for sending the case before a court and jury, and subjecting the citizen to the odium of a substantial accusation and a public trial.

The grand jury being abolished, additional duties are naturally imposed upon the minor magistrates. To each police court, as ordinarily constituted, there should then be attached an assistant or deputy of the public prosecutor; also a public defender, a salaried official, whose duty it would be gratuitously to protect the poor, the weak, and the simple; in fact, all comers unprovided with competent counsel. This would save a large class of unfortunates from falling into the hands of unworthy practitioners, and would weed the profession of a class of men who disgrace both it and humanity. The tribunals thus constituted should devote themselves to the preparation of cases, and the elucidation of the truth upon just and scientific principles. Here let the testimony of the witnesses be taken in the presence of the accused, and subject to the cross-examination of his counsel. Then set the witnesses free, and upon the trial read the testimony of such of them as have fled the country or cannot be produced. It is a wholesome general rule which brings the witnesses face to face with the jury; but it is better to admit of occasional exceptions to this rule than that innocent persons should be subjected to even a temporary depriva-

tion of liberty. The magistrate's first enquiry should be into the antecedents of the accused. Criminal justice should go far beneath the surface of the particular offence. It should penetrate the cause and the motive. The man of blameless life is not to have the same measure meted out to him, either in the matter of proof or punishment, as the hardened transgressor. The influence of the law is thus felt in the daily life and conduct. It offers its premiums to virtue, its warnings to vice. It becomes a real, vital code, permeating society, and reaching its very heart. In connection with the enquiry into his antecedents, the accused should himself be interrogated. There is no rule of the common law more indefensible in itself, none certainly less adapted to the requirements of the present age, than that which seals the prisoner's lips in his own defence, and warns him of the danger he incurs in uttering a single imprudent word. In New York, by statute, he may volunteer his testimony; but why should it not be required of him? Why not himself aid his conviction, if guilty; his acquittal, if innocent? There is but one direct object in the prosecution: not the prisoner's "protection," of which we hear so much, nor yet his conviction, but the establishment of the truth. The truth, by every means, from every source, and at all hazards. For this purpose the accused is to be treated but as an instrument in the hands of justice. The innocent man, surrounded with a chain of seemingly fatal circumstances, gladly seeks interrogation. To him it means explanation, the dissipation of dark clouds, and a speedy release. The guilty is silent, and his silence, as it should, weighs heavily against him; or he speaks, agents are despatched, his statement is tested, it fails to fit, or is found to be absolutely false. The proofs thus supplied, whether by the innocent or the guilty, are not necessarily conclusive. They are simply weighed and compared with all the other testimony and with every ascertainable fact. Thus the possibility of error is greatly lessened, and an accurate and just conclusion becomes almost inevitable. Nor is this a mere untried theory. Interrogation, as is well known, is the rule in France, Austria, and other European countries, and that it works admirably is universally conceded.

A few words in conclusion with reference to a change in the general spirit of criminal justice. The whole structure of the system is based upon the essential and single idea of punishment; punishment, modified and tempered, it is true, both in extent and character, to accord with intellectual and spiritual progress, to avoid shocking a gradually advancing public sentiment, and to keep pace with the moral sense developed by Christianity. The edifice has, indeed, been altered, remodelled in some particulars, even improved; but this firmly rooted foundation—this idea of the all-sufficiency of merely repressive agencies—remains, and occupies the stand-point from which reforms still emanate. Now, the spirit of the nineteenth century is to stop patching and go to remaking. Instead of ameliorating the condition of the slave, it abolishes slavery. In place of special legislation for woman, inharmonious in itself, and a humiliating confession of rooted wrong, some radical change of condition is demanded. For the workingman, co-operation is expounded and pressed. For the pauper, not charity alone, but work. Constitutional checks upon despotism no longer suffice; the need is absolute civil and religious liberty. For toleration, a narrow, mean word, suggestive of soul inquisitions, complete freedom of religious opinion and expression is substituted. Even the Declaration of Independence fails to escape this spirit, and we hear it murmured that all human beings are free and equal before the law. Let us apply this law of the century to the spirit in question, and see where it leads us. The Christian takes the higher ground and enquires into the right of the thing; the mere thinker or political economist contemplates its expediency, and measures its value as a preventive or remedial agent. The two, however, go hand in hand, the inexpediency of wrong being but the converse of the expediency of right.

Now, if there be one thing more than another which has been fully demonstrated by both moral and material experience, it is the wickedness and uselessness of distinctively repressive treatment. This has become an axiom. It extends from the political to the domestic, from the government of the people at large to that of the household, from the bringing up

of children to the treatment of nations. Hoche's successor might still be at work in La Vendée, and Grant might be wearying his troops in the mountain regions and fastnesses of the South, but for the wisdom of kindness. The blow given to the child is more wicked than the fault which, in his folly, the parent thus seeks to correct. It is an example of passion and anger, of moral weakness, and of the existence in the parent of perhaps the very faults which, by an abuse of power, he punishes in another. It corrects nothing, inculcates neither sorrow nor repentance, but in one nature arouses antagonism or hate, in another develops hypocrisy or morbidity, and, in still a third, inspires a dangerous thirst for power. The result is of course the same, no matter what form of punishment is adopted; the blow is but a type. A deprivation of light, or heat, or food is still punishment, still the rod, the old ideas of vengeance and material repression, as distinguished from those of love and gentleness, enlightening the moral sense and developing the conscience. Reasoning, then, from such analogies, mere punishment, so far from preventing or checking crime, can only tend to widen its area and to deepen the passions from which all lawlessness springs. This, too, is ordinary experience: crimes have ever been greater and more frequent in proportion to the severity of the law. Highwaymen never flourished so bravely, never stood so high in public esteem, and were never surrounded with such a halo of romance, as when thieving was a capital offence. The terror with which a public execution was supposed to inspire the assassin did not prevent nearly all the criminals in London from making a gala day of it, and plying every variety of their vocation around the scaffold. The entire police force were powerless upon such occasions; the wildest orgies and the most frenzied debaucheries became the invariable symphony to last dying speeches and confessions. More crime was committed in an hour than could be punished in a lifetime. At length society yielded, the idea of this so-called "wholesome example" was abandoned, and human life was taken more privately. Now, indeed, our Sheriff issues his invitations upon note-paper, delicately and appropriately edged with

black, to a few official guests, and the affair is quite select.

Upon what general principles, then, shall criminal justice be administered? and what is the right and the duty of society with respect to the assassin and the robber? First, the right —clearly self-protection, the removal of the criminal from the society which he endangers; but that sorrowfully, regretfully, without cruelty or passion, and in no revengeful spirit. Second, the duty—quite as clearly the awakening of the moral sense, the speaking to the conscience, the stimulating of what is left of good, making free use of the potent agencies of kindness and gentleness, and, when in due time a permanent soul cure is effected, restoring the patient to his social *status*—restoring him thoroughly and completely, neither sealed, nor stamped, nor branded, but welcomed as one born again. Out, then, for ever, with the influence of the Mosaic law, and of the feudal rules which naturally sprang from it. Substitute the Christian spirit, and let that really permeate our institutions, actuate our policy, and inspire our reforms. When the sentence of the law is once changed from penal servitude to reformatory confinement, a new and noble foundation will have been laid, and the subject will then have passed into the hands of the moral teacher and the student of prison discipline.

GEORGE C. BARRETT.

HEALTH LAWS, AND THEIR ADMINISTRATION.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 28, 1869.

No jurist questions the right and duty of States, through Boards of Health and like instrumentalities, to make and enforce laws compelling the performance of acts which are indispensable for preventing and exterminating pestilential diseases, and removing certain other perils to the public health. But as regards the details of sanitary administration, the appeals to judicial authorities to which they have led indicate that there is still wanting a proper popular understanding of the subject. This want Boards of Health may, if they will, supply by becoming public instructors in hygiene, and in the duties of citizens in regard to sanitary laws and regulations. This has been eminently true of the Metropolitan Health Acts of New York, and the Sanitary Code of the Metropolitan Board of Health. What may be done through official agencies for the better instruction of the people is shown by the experience of England. There the operation of public health laws, under the administration of the Privy Council and local Boards of Public Health, induced thorough discussions in and out of Parliament upon the duty and methods of preventing and controlling contagious diseases; the removal of nuisances; the ventilation of workhouses; the hours and ages of child labor in factories; the drainage of towns; the purity of water-supplies and rivers; the nature and uses of sanitary enquiry and inspection; and a great variety of other subjects that vitally affect and interest the people. These discussions have come to be the principal source of popular intelligence as to the means of protecting and improving human health under all the varying conditions that surround the city and the hamlet, the domicile and the individual. A similar experience now falls to our lot in the City and State of New York. The popular as well as the scientific enquiries which the courts have compelled, or which

the daily press has drawn forth or maintained, and the actual methods of sanitary administration, furnish regular information on sanitary subjects to the public.

Laws relating to the public health partake of the two kinds of intervention which government offers in the affairs of towns and cities, namely, the authoritative and the auxiliary, as defined by that masterly logician, John Stuart Mill.* The first of these necessarily attracts the chief attention of the public, though the second, or auxiliary kind, is by far the most permanent and important, and has been the most carefully studied.

"The laws and administration," says a learned medical jurist, "when operating in the directly authoritative way, do so by prohibiting, directing, or controlling individual action in certain things; but, in their auxiliary relations, by giving advice, promulgating information, and establishing certain agencies for correct procedure, without prohibiting individual action." † Without expressing, in this place, any opinion regarding the limitations which a wise government and an intelligent people should set to the kind of governmental intervention first mentioned, and which a free people like ours will certainly prevent from running to any great excesses, it is very desirable that the auxiliary intervention and influence of sanitary legislation and administration should be thoroughly understood and popularly discussed.

Practically considered, it is plain enough that the two methods should go hand in hand; but I venture to state my conviction, derived from very attentive observation in a large field, that the first step towards the exaltation and efficiency of the auxiliary, or non-coercive, agencies in sanitary administration, is the faithful application of that *smaller* portion of the code which is necessarily and absolutely *authoritative*. No board of health, or sanitary officer, need expect great success in

* See the "Principles of Political Economy, with some of their Applications to Social Philosophy." (Book v., chapter ii.) By John Stuart Mill.

† "Sanitary Legislation and Administration in England." By Henry Wyldbore Rumsey, of Cheltenham.

improving the public health, reducing death-rates, removing and preventing nuisances, or giving popular effect to sanitary laws in any manner, if any of the authoritative provisions are left to execute themselves. In the face of pestilence or any kindred peril, a timid or vacillating health government is scarcely less dangerous than the disease itself. But it is equally true that officers and boards of health which attend only to executing purely coercive measures, in disregard of the auxiliary or educating agencies of a sanitary system, will fail to attain the chief end for which they were constituted.

During the past four years, the attention of thousands has been drawn to the operation of the new sanitary system in this metropolitan district. Our Health Act of 1866 was based upon the great principle that the protection of the public health against pestilential contagions and nuisances is *supreme law*, and that the Board of Health should so administer as to *prevent* as well as control the chief sources of danger and detriment to the public health. The few provisions of this Health Act which are mandatory and absolutely authoritative, enable the Board to deal promptly with the causes of pestilential disease, and with all wilful and needless violations of the chief sanitary laws and ordinances; but the statutes, and especially the code based upon the statutes, and framed by the Board and its legal counsellors, provide for the exercise of the auxiliary agencies, which, if properly developed, must greatly diminish the number of needless and reckless violations of health laws. Already we witness the first fruits of the *instructive* agency of these laws, and the following facts will serve as illustrations.

At the time the Metropolitan Board of Health began its work, in the spring of 1866, the eighteen thousand five hundred tenement-houses then existing in the city of New York seemed to baffle all efforts for their improvement. The Board's orders directing that their halls and dark bedrooms should be ventilated were continually defied and contested by the owners and lessees. Time passed on; the courts and the press freely discussed the merits and constitutionality of the health laws. Meanwhile the few tenement-houses that had received the requisite ventilation and other sanitary improvements became

populated with the best paying tenants, who in numerous cases joined with their landlords in words of commendation of health laws and their good results. And now we are able to report that in the past nine months several thousand tenement-houses have been ventilated from cellar to garret in the manner required by law, and that in this great improvement the Board of Health has in no instance executed by its own agents the structural alterations which it had so ordered, and that by far the greater part of this work has been promptly and cheerfully performed by the owners, without legal controversy.

Again, at the time the Board commenced its work, a little more than three and a half years ago, and even until the beginning of spring in the present year, the cellar population in New York amounted to between sixteen thousand and twenty thousand persons, who seemed as immovable as troglodytes. The possibility of emptying any of these dens of death of their inhabitants, and barring the dismal places against rehabitation, was doubted even by the philanthropists who bestowed their sympathy and their charities upon the wretched occupants; but the effort for closing the worst of them has been commenced, and in the course of the past few months upwards of one hundred of the lowest and most populous of them have been vacated by the Board's orders. In many of them there lodged more than twenty persons every night. The owners and lessees of such property seem ashamed of the condition and mode of life witnessed in these places by our Sanitary Inspectors; they yield to the requirements of the Board's orders, and in no instance thus far has it been found necessary to use any force, or to procure writs of ejectment against the miserable inmates. We would mention in this place that in dealing with these cases we employ a special cellar visitor, to aid the poor people to understand the reason and necessity for this reform.*

* The following description of some of these cellars and their inhabitants will serve to illustrate the necessity for this reform:

[COPY OF AN OFFICIAL COMPLAINT AGAINST A CELLAR.]

TO THE METROPOLITAN BOARD OF HEALTH: I, . . . , holding the position of Sanitary Inspector in the Metropolitan Sanitary District of the State of

Again, in dealing with contagious diseases, it is found that the masses of the people yield cheerful compliance with the requirements and advice of the sanitary authorities. We will instance, first, the recent very threatening presence of small-pox in the city. Causes that need not here be mentioned had planted this most loathsome contagion in more than one hundred

New York, do report: That on the 7th day of April, 1869, I did inspect carefully, and personally examined, the cellar-basement situated at No. 437 East Twelfth Street, front building, in the city of New York, and found the facts to be as follows: Said basement is in a condition dangerous to life and detrimental to health, and unfit for human occupancy, for the following reasons:

The light, drainage, and ventilation are very imperfect. *Light.*—The only light is from two small windows in the dwelling-room. This is so imperfect as to render faces in the farther end of said dwelling-room hardly recognizable.

Drainage.—Water from the yard flows freely into the rear area adjacent to this basement, and thence leaks through the walls of said basement, rendering said walls constantly damp. There is no cess-pool in said area.

Ventilation.—There are two dark bedrooms, having no direct communication with the external air; each of these bedrooms has but one ventilating-window, which communicates with the dwelling-room adjoining. There is no through and through ventilation.

The entire basement is in a filthy condition. The walls and ceilings of all the rooms are foul with dirt and grease. The floors of the hall and all the rooms are very dirty. The atmosphere of the rooms is close, offensive, and stifling. The basement is nominally occupied by one family, but lodgers, to the number of from five to ten, are nightly received. When the maximum number is present, there are at least fifteen occupants. The capacity of the dwelling-room is 1,680 cubic feet; that of the two sleeping-rooms is 1,120 cubic feet. This gives an average space of 112 cubic feet in the dwelling-room, and of 74⅔ cubic feet in the sleeping-rooms, per occupant. The ceiling is on a level with the surface of the yard. Several cases of serious sickness have been distinctly traced to this basement; at present there are two cases on the premises. I do not believe this basement can be made fit for habitation.

Dated April 10, 1869. Signed, . . . , M.D., Sanitary Inspector.

Another Example.

. . . . . .

. . . 63 James Street, . . . found the facts to be as follows: . . .

The cellar is used as a lodging-place. The measurement from floor to ceiling is 6½ feet. In this cellar the ceiling is 6 inches below the level of the sidewalk. No windows of any kind in front or rear; a lamp was necessary to make the inspection.

different places in the city, and distributed it all the way from the Battery to Harlem and Carmansville, in such places and in such a manner as to ensure its rapid and wide-spread ravages. During the preceding two years or so, there had been much idle clamor, kept up by a few persons, against vaccination, and in opposition to the concern of sanitary officers about this duty in

The cubical space of cellar is 2,700 feet. It is not ventilated in any manner.

The floor is in a very bad condition, the boards rotten and covered with filth and dirt, and very damp.

There is no area in front or rear; no drainage. Dampness comes from natural sources.

The atmosphere was so offensive that the door had to be held open while the inspection was made. The floor, walls, beds and bedding, very filthy, stinking and reeking with the most unwholesome emanations and odors.

Name of tenant, John . . . . , Tailor.

There are six double beds and one single one in this cellar. I consider this cellar dangerous to the life of the people who live in it.

Signed, ... , M.D., Assistant Sanitary Inspector.

Another.

. . . 64 Cherry Street. . . . Said tenement-house is a 3½ story building, owned by . . . of No. . . Broadway, occupied by seven families. The condition of said house is in violation of certain sections of Chapter 908 of the Laws of the State of New York, passed May 14, 1867, viz.:

The cellar is used as a lodging-house. It is but 6 feet from floor to ceiling. It is on a level with the sidewalk. There are no windows in front or rear of any kind. There are 1,800 cubic feet of air-space in cellar. There is no ventilation whatever. Floor was damp and very dirty.

There is no excavated area in front or rear. There is no drain under floor. The cellar walls were very dirty from smoke and grease.

Tenant, Mrs. . . . , on premises.

There are ten double beds in this cellar; the occupants are transient lodgers.

This cellar cannot be made to conform to the law. I consider the occupation of this cellar dangerous to the life and health of those who sleep therein. Signed, ... , M.D., Assistant Sanitary Inspector.

The following endorsement by the Sanitary Superintendent was followed by orders from the Board, and the prompt evacuation of the cellars:

"Respectfully submitted to the Board of Health, with the recommendation that this cellar be immediately vacated, cleaned, and disinfected, under an order from the Board of Health, and not again occupied as a habitation.

. . . . , Sanitary Superintendent."

April 10, 1869.

schools and elsewhere. The danger had at last become imminent; two hundred and twenty-five cases of small-pox had been discovered in the city between the first day of January and the last day of May. On the latter day, a plan for systematic canvassing, by house-to-house visitation, throughout the entire city, was put into operation, and by the liberal and unanimous vote of the Board of Health sixty physicians were added to the twenty already on duty as Sanitary Inspectors, and the whole force was concentrated upon this work of house-to-house vaccination. These gentlemen could use no coercive measures in the task they undertook, but they were charged to *explain the duty of vaccination*, while they offered this boon in every street. This course unbarred all doors, and broke down all opposition. They triumphed in the work, and thereby conferred a benefit upon the metropolis which saved many hundred lives, and protected its commercial interests against the loss of millions of dollars that would have resulted from the continued and increased ravages of the contagion. In the six weeks ending June 15 there had been no less than sixty-one cases of small-pox discovered, and placed under sanitary care, in the Sixteenth and Twentieth wards alone, in the small district lying between West Fourteenth and West Fortieth streets, Sixth Avenue and the North River. The work of vaccination in those wards was completed July 10, and from that date until October 10, only three cases of small-pox have been found in the Sixteenth, and only four in the Twentieth Ward. These persons had not received the boon which the Board's vaccinating corps offered from house to house.

As to what would have been the result of neglect to offer vaccination in this manner, and to instruct the people in their duty concerning it, we may judge from the events of the winter of 1864–65 in our city, when upwards of two thousand cases of the disease and more than six hundred deaths occurred. Then the panic became so great that thousands of merchants visited other cities to make their purchases, who would otherwise have come to New York.

Turning to the history of the last visitation of cholera, we find various illustrations of the uses of the instructive auxi-

liary agency of sanitary administration, which will equally well illustrate the uses of the same agency in regard to other prevailing diseases. Everybody will recollect how much was said of the vigorous methods by which Asiatic cholera was "stamped out" in the summer of 1866; but few persons are aware how assiduously and how studiously authoritative measures were coupled with instructive auxiliary agencies. Yet it was the latter that ensured success and popular acceptance to the former measures, and the operation of them continued long after the unwelcome visitor had been expelled from the city. After stalking across the continent as a dreaded but faithful sanitary inspector, cholera left the people of the United States eagerly enquiring into the means of preventing the local and individual causes of disease, and reducing the high death-rates in our cities. The Metropolitan Board of Health did not permit the lessons of cholera to go unstudied; and now, when the great works of permanent sanitary improvement are being pushed forward in all sections of New York and Brooklyn, it is found that the enquiries which were incited by the pestilence have an abiding value in aiding to solve doubts and remove objections that would hinder the success of sanitary administration.

The past history of cholera epidemics rendered it certain that, when it revisited us in 1866, it would seek certain localities and linger longest in particular quarters that most needed to be improved by drainage, scavenging, and general sanitary regulations. It was likewise well known that the same soil and local circumstances nourished the New York scourge of summer diarrhœal disorders and the exotic from Asia. The chart of cholera fields in New York shows where those fields are, while the reports and complaints of Sanitary Inspectors show that they are the localities in which they most urgently ask for deep drainage, grading, drying, and surface cleansing. In no other respect have the practical lessons of cholera and the summer mortality of children been more effectual in promoting local reforms than in regard to the works of deep drainage and of thorough cleansing which the Board of Health now strives to enforce in what may be termed the natural cholera fields of the city. It is true of the deep drainage now

in progress, that much of the work is going on in sections that are just passing from the dominion of squatter sovereignty to occupation by palatial mansions of the wealthy classes. Nearly one hundred acres of low grounds and basins—natural or artificial—along our up-town avenues, are at present having deep drains and broad and massive culverts introduced at the low level of the original water-courses and springs, and at a depth of from ten to fifteen feet below the level of the street sewers in the immediate neighborhoods. All this great work is being executed by the property-owners, without any other intervention by or cost to the sanitary authorities than that which attends the sanitary inspection, the engineers' plans, the Board's official ordering, and the faithful representation of the importance of the work to the owners of the lands, after they received the Board's orders to drain and culvert.

These illustrations might be multiplied almost indefinitely; for, in whatever direction, and against whatever sources of insalubrity, the health laws have been brought to bear, it is found that success in their application has been invariably followed by increase of general information concerning the reasons and necessity for each particular improvement. In some of these sanitary improvements, the official work has been aided by the rapid growth of correct knowledge of the sanitary facts, as in deep drainage, which we have already mentioned; while in some other instances, for example in the exclusion of butcheries and offal and fat boiling from the built-up quarters of the city, and the restraints that have been brought to bear upon a great variety of nuisances, the general information of citizens and of persons concerned has so increased as to facilitate the execution of still more thorough measures for controlling such sources of nuisance. It is now entirely prudent to apply a far more rigid treatment to such matters.

The only other subject to be mentioned in support of the views advanced in this paper is the much neglected method of sanitary enquiry, which requires the registration and severely accurate analytical use of statistics relating to disease and mortality. In the chart of the cholera and diarrhœal fields in New York is seen one of the ready though rather rude modes of

statistical enquiry and evidence on a limited series of questions. Similar enquiries, more absolutely accurate in their relations, have been steadily pursued in regard to a great variety of questions. For example, under the Board's authority we have for two years caused accurate records to be kept of the mortality in our New York tenement-houses, house by house, block by block, and street by street. The total number of deaths in these crowded dwellings in the nine months ending October 1 this year is now found to have amounted to 10,251, while in the corresponding nine months of the year 1868 the total number of deaths in the same class of houses, though that class has increased during the present year, was 11,703, or 1,452 in excess of the total of this year. Further, it is found that the gain to human life in the metropolis, the past nine months, has been confined exclusively to the tenement-dwellings, when estimated thus by the aggregate method. Again, upon closer analysis, we have ascertained that, in particular blocks of tenement-houses which at the beginning of the year were brought under the very thorough reforms in ventilation, etc., required by the health laws, the total mortality has been diminished at the rate of fifteen, twenty, and even thirty per centum below the death-rate of the previous year. Though it is true that this gain has been witnessed chiefly in child-life, and especially in regard to pulmonary diseases and the maladies affecting the brain and nervous system, even this feature of the gain makes the lesson all the more instructive. On the other hand, we have found that, in particular piles of tenements that remain entirely unreformed, not only has no gain to the chance of life been experienced, but, on the contrary, the losses have continued to increase. For example, that notable instance of the old Baptist church property at 5, 7, and 9 Mulberry Street, mentioned on page 516 of the Third Annual Report of the Board of Health, as having buried twenty-five of the wretched tenants in the first nine months of the year 1868, has, *during the first nine months of* 1869, *given to the death register no less than thirty-one names!*

Still another chart exhibits the course of mortality and the fluctuations of death-rates in diagrams, and by mathe-

matical lines that have no regard to theories or sentiments. By such homely and material aids must we endeavor to instruct ourselves and our fellow-men in various matters relating to sanitary supervision and the results of sanitary enquiry. And even in regard to certain practical uses of such enquiries in the abstruse and poorly studied department of vital statistics, both health officers and the people need to be kept informed. Most appropriately does that model of public hygienists, Dr. William T. Gairdner, the chief medical officer of Glasgow, state the facts on this subject, when he says: *

"I affirm, then, that the first great object of sanitary organization should be *to watch the death-rate:* to watch it not only over a city or a parish, but in detail; to watch it with due regard to differences of age, sex, place, and circumstances; to watch it from month to month, and even, if possible, from week to week; to watch it as affected by different diseases, particularly what are called epidemic diseases, and such diseases as we have reason to believe to be in a great degree preventable; and this done, to make known the result from time to time, especially to those who are chiefly concerned in sanitary evils and their removal, so as effectually to bring home to the dwellers in darkness, ignorance, and disease the immense significance of the facts taught by these figures."

Is it asked, Will the necessity for health laws and sanitary supervision never cease? Must mankind be ever learning how to live healthfully—how not to give offence against the public health? Certainly, while human nature remains what it is. The higher duties which we owe to our fellow-beings are ever recurring in a series as endless as the successive generations of men; and were these great cities to-day found in a faultless sanitary condition, still the prevision and vigilance of health authorities would be needful to prevent the great evils which, in unrestrained communities, grow rapidly into a debasing force

* "Public Health in Relation to Air and Water." By William T. Gairdner, M.D.

that breeds at one birth the worst of afflictions, social and physical. As was said by the English Registrar-General, when reporting to Parliament the perfect sanitary reform in the little city of Salisbury, so must we say of the best sanitary results we witness: * "Experience proves, the health of a city, like the sacred fire on the altar, requires the constant vigilance of its guardians."

ELISHA HARRIS.

* "Twenty-sixth Annual Report of the Registrar-General."

AN INTERNATIONAL CODE.

A PAPER READ AT THE GENERAL MEETING OF THE ASSOCIATION, AT NEW YORK, OCTOBER 28, 1869.

At the annual meeting of the British Association for the Promotion of Social Science, held at Manchester, in the autumn of 1866, a proposition was made for the appointment of a committee to prepare the outline of an International Code, to be submitted to a future meeting of the Association. The design was to have this outline revised and filled up under the auspices of the Association, and thus to make the draft of a code as complete and perfect as possible; in the hope that the work thus made and sanctioned would not only carry with it the authority of its framers, but would so commend itself to governments and people that, through discussion and conference, it would be finally received as an authoritative rule for nations and individuals upon international relations. The proposition was favorably received, and a committee was appointed, consisting of jurists of different countries. The work has been undertaken, and considerable progress made. Another year, it is to be hoped, will see the outline completed and ready for submission to the Association.

Thinking that the subject will commend itself also to the attention of this kindred American Association, I venture to bring it before you on the present occasion. To no other people is international law more interesting and important than to Americans; by none have its harshest rules been more strenuously resisted; and it is hardly too much to say that none have done more for its amelioration. What is an International Code as now proposed? Can it be made? What chance would there be of its adoption? And what good would it do if adopted? The answers to these questions will form the topics of this address.

What is an International Code? A code is a body of law, complete in itself, expressed in distinct propositions, condensed, classified, and arranged in scientific order. International law is that body of rules recognized among nations, defining their rights and duties towards each other, and the rights and duties of their people respectively, as growing out of international relations. An international code is, therefore, nothing more nor less than a code of this international law.

This law is vast in extent and infinite in detail. It encircles the earth, holds, or assumes to hold, the strongest nations in its grasp, and affects to a greater or less extent the relations of every human being. You may entrench yourselves in camps and fortresses, yet its voice will reach you; you may take the wings of the morning, but you cannot escape its presence. Its office is to regulate the conduct of your own nation towards all other nations and all strangers, and to govern and protect you into whatever part of the world you go. No sovereign is so haughty, no subject so poor, as to be beyond its authority. It knows neither latitude nor longitude, wears the same face under northern and southern skies, and utters one voice to the Caucasian, the African, and the Mongolian.

It teaches the reciprocal relations of nations and of their people in peace and in war; the duties of a nation towards other nations and their individual members; and, reciprocally, the duties of the individual members of a nation towards other nations and their members. If you ask what is the rightful jurisdiction of nations over the persons, property, and obligations of foreigners; what facts constitute domicile, and what is the effect of a change of domicile; what is truly the tie of allegiance, and its limits, and the rights of expatriation and naturalization; what is meant by the equality of nations, and what are their relative rights in respect to extra-territorial action, as, for example, navigation, exploration, discovery, colonization, fisheries; when, and to what extent, and on what conditions, one nation may insist upon trade or other intercourse with another nation or its people; how the intercourse of governments should be carried on, and by what agencies and under what immunities; what are the just rights of foreigners

in respect to residence, occupation, religion, asylum, extradition, acquisition and transfer of property, and their duties in respect to taxation, civil and military service, and obedience generally to the laws of the country of residence—if you ask any or all of these questions, you will find the answers in an international code. If you refer to those subjects which are variously treated under the titles of "Private International Law" and "Conflict of Laws," and which rest partly upon usage and partly upon what is called "the comity of nations," as, for example, the effect to be given in one country to the judgments of the courts of another, the validity of foreign marriages and divorces, the rules of succession, and the interpretation of foreign contracts, you will perceive that they, too, have their proper place in an international code.

Passing from these subjects which relate to a condition of peace, to those which relate to war and its consequences, you find that here, also, an international code would instruct you how the war may be begun, and how it should be carried on; what persons may wage hostilities, and what they may do against the persons or property of armed or unarmed enemies; the immunities of hospitals, surgeons, and nurses; the punishment of spies; the treatment and exchange of prisoners; the rights of non-combatants; the exemption of particular property, public or private, from capture or destruction, and the manner of disposing of that which may be captured on the sea or on the land; then, after teaching the rights and duties of belligerents, it would teach also those of neutrals, and show how far they may, under any circumstances, intervene, whether by mediation or other action more direct, and in what trade or intercourse they may engage with either belligerent; and when at last the war is terminated, as all wars must terminate, in peace, and questions arise of restitution or permanent possession of captured territory or other property, it would dispose of these questions also.

The rules of international law which now prevail have various sources. Most of them have come from usage, some from treaties, and a few, perhaps, from the legislation of particular countries. They are not always consistent with each other;

some are admitted and some disputed; and not a few are unreasonable and oppressive.

The present scheme contemplates the preparation of such a code as would be prepared by persons specially commissioned by the different governments to make the best code they could devise for nations and individuals in their international relations, with a view to lessen the evils of war, promote peace, facilitate intercourse, and bring about that good-will among men which should be the wish and aim of philanthropists and Christians.

This is but a rough sketch, and shows very imperfectly the full scope of an international code as it is proposed, and the extent and variety of subjects with which it would have to deal.

Can such a code be framed? and, if framed, what are the chances of its receiving the sanction of governments or people? The first question is easily answered. There is no more difficulty in framing a code of international law than of national, or, as it is sometimes, though incorrectly, called, municipal law. The established rules of international law have already a written record. They are contained in the treaties entered into between nations, in acts of legislation, in the decisions of courts of law, and in the treatises of publicists. All that is there contained can be gathered together from its various repositories, condensed, analyzed, arranged, and stated in distinct propositions. Indeed, the answer, so far as relates to the existing law, has been already given by actual experiment. When the proposition was first made at the British Association, no code of international law had ever been attempted. Since then, however, a German publicist, Bluntschli, has, with great success, arranged most of the established rules of international law in the form of a code. As to the debatable questions, they must be solved, as they can be solved, by discussion, conference, and general assent of publicists first, and the sanction of governments afterwards. The ameliorations to be made must be arrived at in the same way. If law be, as it has been pronounced, the highest reason applied to the affairs of men, those advances which are required by the present development of international intercourse, greater than the world ever saw

before, and by our advanced stage of civilization, can be reasoned out and explained.

The answer to the question whether, if rightly framed, such a code would receive the sanction of governments or people, depends much upon the answer to the further question what good would it do if adopted, since it is to be presumed that, if the material interests of the world are likely to be promoted by it, its ultimate reception will take place. Let us, then, proceed to consider what good it would do.

Its first great office and advantage would be to inform governments and people of their international rights and duties. That information on those topics more general than now exists is extremely desirable, who will venture to deny? Three times, at least, within the last seven years, our own Government has been on the verge of hostilities or of most embarrassing complications upon questions of international law, twice with Great Britain and once with Spain; with the former in respect to the *Trent* and the *Alabama*, and with the latter in respect to Cuba. It is not within the scope of this address to enter into a discussion of these cases with the view of arriving at a true solution of the questions they involve, but to point out how a better acquaintance on all sides with the rules of international law would have saved us their embarrassments; for it is as certain as any result can be that, if the true rule had been clearly defined and understood, two kindred nations would not have run the risk of serious conflict, nor would there now be any ground of debate respecting our duty in regard to the insurrection in the chief island of the Antilles.

To know the law is the first step towards obeying it. There may, indeed, be knowledge without obedience, as there may be obedience or conformity without knowledge. But knowledge is essential to a rational sense of responsibility, and a due exercise of it. To inform the conscience is as necessary as to incite it. The more popular is the government, the greater is the occasion for this information. The public conscience is apt to be weakened in proportion as it is widened; and it is one of the disadvantages of popular governments

that responsibility is so diffused as to lessen the weight of it upon the individual citizen. It is no uncommon thing for men to participate or acquiesce in acts of the community which, individually, they would scorn as derogatory to their honor and conscience. While, therefore, a knowledge of international claims and obligations is important to all governments, it is especially important to those which spring from the people, and act as the organs of their will.

The second advantage of the proposed international code would consist in the opportunity thus given for a general revision of international law. Such a revision has become, indeed, a necessity. I have already referred to the debatable questions. How many such there are, the history of this country too plainly testifies. In its earlier years, our diplomacy was burdened with never-ending disputes about the rights of neutrals. We had to contend with the preposterous claims of England as a belligerent, and the still more preposterous claims of France; with British orders in council, and the Berlin and Milan decrees, with spoliations on the high seas and in friendly harbors, with prize-courts confiscating for each belligerent, with impressment of seamen in the name of perpetual allegiance, and the confiscation of cargoes in spite of the neutral ships which bore them and the neutral flag which covered them. We resisted these claims, and many of them have been abandoned, but the law has not been definitively settled as it should be by the concurrence of the civilized world. As nations have no common superior, there is no human law-giver competent to make laws for them. Whatever changes occur must be made by common consent, and the most direct manner of giving that consent is by treaty. The code proposed is an important, not to say indispensable, preliminary to such a treaty. The theory upon which the work is undertaken is, as I have already stated, that the jurists who prepare it shall make it as they would if they were commissioned by the different governments to prepare the best that they could devise, having regard to what is already settled, to what is disputed, and to what seems to be demanded by the wants of increasing

commerce, the maintenance of peace, the instinct and spirit of human brotherhood, and the Christian civilization of the whole human race. When such a code is framed, it will not be unreasonable to hope that a conference of representatives from different governments may be had, from which concurrent treaties will spring for its sanction and adoption. Joint or concurrent treaties are not new in the history of diplomacy. The treaties of Vienna, after the final overthrow of Napoleon, settled for a generation a considerable part of the public law of Europe. Congresses of the great powers have been often held since, and a general congress of nations for the revision of international law would be but a step, though a great step, in the same direction.

But the greatest of all the opportunities offered by an international code would be that of amelioration. The domain of international law can be greatly and wisely extended. The ties which bind the nations together can be multiplied and strengthened. We have shown by our example how independent states can be brought together in the closest relations. Our Federal Constitution is indeed a sort of international code, binding together States which otherwise were sovereign. But without claiming that the federative system can be extended so far as to include all nations, or even those of Christendom, it is fairly to be claimed that it may be extended greatly beyond its present limits. Some European statesmen have even dreamed of a European confederation on the general plan of our own. Whether that is merely a pleasant dream or something that may become true in the happier future, none of us can tell. But this we may say with undoubting confidence: that a community of the nations, under the mild and beneficent rules of an international code, guaranteed by treaties and enforced by the courts, is within the grasp of the present age.

Let us glance at some of the ameliorations which seem now to be possible. In doing so, I give merely my own views, without speaking for any of my associates. We will begin with the questions of allegiance, expatriation, and naturalization. These are questions upon which our Government

maintains doctrines the very opposite of those maintained by most governments. The opposition is easily accounted for. Monarchical governments rest upon the theory of personal allegiance. "Once a subject, always a subject," is a feudal maxim coeval with modern civilization, which it has been the instinct and pride of feudal sovereigns to maintain not only at home, but in all colonial possessions. The accident of birth bound the sovereign and subject together by a chain which neither age nor distance, nor altered circumstances, could break; it stretched across the seas and bound both hemispheres. But when colonial dependence was broken, the feudal tie was broken with it. The subjects of ancient crowns became the citizens of new states, linked to them by an undivided obligation. Thus fell the dogma of perpetual allegiance. The new states invited new settlers, and these, of course, were to be protected in their settlements. When emigrants of different nationalities settled in the same new country, the absurdity of holding them bound to as many sovereigns as they had left was but the more glaring. It was easily to be foreseen that the question would finally become one of mere power and will.

And so it has happened. The moment this country became strong enough to maintain its claims in the face of every other country, that moment it was evident that the rights of expatriation from an old state and naturalization in a new one were to be thenceforth asserted, defended, and acknowledged. In this spirit the later treaties have spoken, some more and some less distinctly. Prussia admits the right with burdensome qualifications; Great Britain more frankly and fully. It is time that the right of every person to leave at pleasure his own country, and settle in another, with all its consequences of renunciation of allegiance in respect to the old, and assumption of it in respect to the new, were universally admitted. This, it can hardly be doubted, is one of the subjects which will receive a distinct and authoritative solution whenever an international code is established.

Another class of subjects of international concern, in respect to which an international code may be expected to be of much advantage, is that which relates to uniformity in matters upon

which it would be profitable or convenient for different nations to agree. Our federal constitution proceeds upon this theory when it provides that Congress may "establish a uniform rule of naturalization, and uniform laws on the subject of bankruptcies, throughout the United States." There are subjects not a few on which it would be for the convenience and profit of all nations that uniform regulations should be established. Among them are money, weights, measures, copy-right, patent-right, time, longitude, sea-signals, and rules of navigation. There is no sufficient reason why there should not be a money standard uniform throughout the world. The loss and inconvenience of changing from dollars to pounds, from pounds to francs, from francs to florins or thalers, have been felt by traders and travellers the world over. Uniformity here is possible and most desirable. So with weights and measures. Why should intercourse be hindered and commerce perplexed with endless changes in the designation of quantities? Science proffers a common standard. We throw away our opportunities and advantages when we refuse to agree with the people of another country upon that uniform system which would benefit us both. Already there are treaties between France, Italy, and Switzerland, providing for a uniform system. These treaties can be extended, or treaties similar in character made, so as to embrace not two or three nations only, but all the nations of Christendom; which is but another form of saying that an international code established by treaties can provide for these among other matters of universal concern.

Another subject for which an international code might provide, though not specially important for this country, yet most important for Europe, is a general disarmament. Instances of treaties to a similar effect are found in our own with Great Britain respecting armaments on the lakes, and between Russia, England, France, and Italy, respecting fortifications and armaments on the Black Sea. The principle of those treaties can be applied on a larger scale with evident advantage. What was accomplished after the Crimean war by four European powers cannot be impossible for eight in a season of profound peace. This question concerns us only as we feel everything which

concerns the great body of Christendom. But the relief to Europe which a general European disarmament would bring is incalculable. There are now, it is computed, from three to five millions of men in the standing armies of that continent. These men are withdrawn from industrial pursuits, and are supported by the labors of those who remain. Society loses, therefore, not only all that these millions of soldiers would themselves produce if set to work, but all the labors of those other millions who are engaged in supporting them. The productive industry of the world is lessened as much as if a pestilence had swept from the earth the hosts of armed men whose tread shakes the soil of Europe, and the other hosts of toilers for their support. This is the material view of the question. But if beyond that we look at the demoralization produced by these armies scattered in camps and fortifications, we shall feel that no single measure which the ingenuity of statesmen could devise would do so much for the relief of Europe as a general disarmament.

Looking to the prevention of war as far as possible, I believe that some plan of arbitration can be devised to which governments should pledge themselves to submit before resorting to hostilities. There does not appear to be anything chimerical in such a scheme. Suppose that this country and England, in an earnest endeavor to secure perpetual peace between themselves, should appoint plenipotentiaries to devise the terms of a treaty by which each government should be bound to refer matters of dispute to the arbitrament of a friendly power, or to commissioners chosen by the two governments before a declaration of war. Would it not be possible to make such a treaty in terms acceptable to both nations? And what is possible between these two nations cannot be impossible between more than two. In the progress of our country towards "a more perfect union," it was provided by the articles of confederation that disputes between States should be determined by commissioners or judges selected by the disputants, or, if they failed to select, then by commissioners chosen in this manner—three to be named by Congress from each State, each disputant to be at liberty to strike off alternately one name, till the number was

reduced to thirteen, and from these thirteen Congress was to select not less than seven nor more than nine to judge the matter. By some similar means many of the disputes between nations, which otherwise would lead to war, might be settled; and though war might not always be prevented, its occurrence would be rendered less frequent.

In the conduct of war by the belligerents, as well as in its effect upon neutrals, there may be great ameliorations. For ever to be rejected with scorn is that maxim of mistaken policy which would make war as severe as possible, with the view of preventing its occurrence or shortening its duration. If this were a true maxim, hostilities should be conducted with the barbarity of savages. "Burn and kill as much as you can, spare neither age nor sex, neither house nor temple," should be the commission to every commander. "Give their roofs to the flames, and their flesh to the eagles," should be the cry of the combatants as they desolated each other's homes. But this would be to reverse the current of history; to make the sun go back on the dial. If anything has been learned in the ages, it is to lessen both the occasions and the severities of war. The movement has been gradual and constant towards confining its operations to the actual combatants, and obliging them to treat each other with humanity. In this spirit I would have an international code to be framed, and in this spirit it must be framed, if it would command the sanction of the governments and people of Christendom. Keeping steadily in view the principle that war should be waged only against those who wage it, that private persons and private property should be placed as much as possible beyond its ravages, I would stipulate for the absolute immunity of private property on land and sea, unless it be in some way used for the support of hostilities. Why should my house be burned by an invading army if it be used only for my own purposes? And is there any more reason why my ship crossing the sea should be devoted to destruction? It is easy to see that the maritime supremacy which England maintained so long made her adopt and enforce the policy of capturing and confiscating every vessel belonging to any member of the country with which she was at war; but it

is time that this anomaly was removed from the public law of the world. In respect to the persons engaged, the rules of warfare may be changed for the better. Movements in that direction have been made lately with much success. The conferences at Geneva provided for the exemption of hospitals, surgeons, and nurses; and the late conference at St. Petersburg has led to a very general agreement not to use explosive materials in musket-balls.

We may go further and provide for the absolute immunity of all private persons, for all who are not engaged in the actual operations of war. The inhuman doctrine that a fortified place may, under any circumstances, be given up to murder and pillage, should be blotted out for ever. St. Sebastian should never have a parallel. A bombardment like that of Valparaiso should be accounted infamous, and the armed ships of every nation should be bound to prevent it as they would prevent any act of piracy.

Passing from belligerents to neutrals, we see how much good may be done by lightening as much as possible the burdens of war upon neutral transactions. The lists of articles contraband of war can be reduced in the interests of commerce. The right of visitation and search can be defined and limited. The duty of neutrality can be explained and understood in a better sense than hitherto. If there were really any question about the *Alabama* or the *Cuba*, it is time that no opportunity should be left for such a question to arise hereafter.

These are but examples of what it seems possible to accomplish by an international code. I have endeavored to show that such a code can be prepared; that, if rightly prepared, it would gradually make its way to the acceptance of Christendom, and through Christendom the world; and that, if thus accepted, it would prove a benefit to the whole human family. How far I have succeeded it does not rest with me to know; but I will venture to ask you to join me in the hope that what is thus thought possible may prove in the end a reality, and that a scheme which promises so much good may, even in our days, come to pass.

DAVID DUDLEY FIELD.

GENERAL INTELLIGENCE.

1. Home.

Social Reform Movements in the United States.—It cannot have escaped the notice of careful observers of social progress in this country, that ever since the close of the war the interest of our people in public questions, other than political, has steadily increased. The growing attention paid to social problems by the thinking portion of the public is really surprising and not a little encouraging. It is true they are not always approached and treated with that intelligence, prudence, and willingness to profit by the teachings of science and experience by which alone their proper solution can be attained; but the fact that they are seriously considered at all is a very hopeful sign. The tendency to consider the wants of society, even more than those of the State, has been more decided during the last, than during any preceding year since 1865. Reforms in laws, and the methods of their administration, in public economy, education, sanitary regulations, and in other fields, have occupied the public mind more or less profoundly in different States. So great has been the diversity of reformatory efforts in 1869, that it would be difficult to make a full record of them all. In the following general review, intended mainly for the benefit of our foreign readers, reference is made only to the more noteworthy social movements in that period.

Among the reforms relating to laws and the methods of their administration agitated last year, the proposed reorganization of the civil and diplomatic service of the General Government on the basis of competitive examinations and probationary appointments, which has been strongly advocated for a long time in and out of Congress, again played a prominent part. But it came no nearer to realization in 1869 than in the preceding years. In the hope of producing an impression upon the incoming federal administration, this Association early in the year originated several public meetings and other demonstrations in favor of this reform. In Congress, too, the subject was again elaborately dis-

cussed, shortly before the inauguration of President Grant. But neither the resolutions of public meetings, nor the presentation of largely signed petitions, nor the discussion in Congress, had the effect of ensuring either the passage of the Civil Service Bill, pending in the House of Representatives, or the adoption, as expected by some overconfident people, by the new administration of a test in its civil and diplomatic appointments, other than faithful service to the ruling political party. The Republican politicians clamored for a distribution of the spoils according to the old fashion, and the administration readily yielded to their demands, in most branches of the public service at least, as regarded inferior appointments. It is true that less mischief has grown so far out of the adherence of President Grant and most of his Cabinet to the time-honored party usages in this respect than from the same practice under the preceding administration. But no one will be bold enough to contend that the character of the present office-holders is so elevated as to render a change in the methods of appointments superfluous. The general public, notwithstanding some grave mistakes under the rule of rotation, has manifested an all but absolute indifference to the subject since last spring. Nevertheless, this Association reopened its agitation in the fall. Since the assembling of Congress, too, the case assumed a more hopeful aspect. The emphatic plea for a system of competitive examinations in the annual report of the Secretary of the Interior made no small impression upon the public mind. The friends of the reform in both Houses of Congress also received accessions of strength among the new members. The bill "To reform the Civil Service of the United States," introduced by Senator Schurz, just before the close of the year, is even more sweeping than the old House bill.

The extensive fraudulent voting in the State and Presidential elections of 1868 led to a general discussion of the abuse of the elective franchise and of the best means of preventing it, in the first half of 1869. The enormous frauds in the city of New York were thoroughly investigated by a Congressional committee, the results of whose labors were an elaborate report upon the facts in the case, and the recommendation of a general remedy in the form of an amendment to the Federal Constitution, providing for the election of Presidential electors by Congressional districts, instead of on general State tickets. The proposed

amendment, however, was not acted upon. Various other remedies were proposed in Congress in the form of amendments to the naturalization laws, which are still pending.

The subject of sumptuary laws as a means of promoting public morality continued to engage public attention very actively in some of the States. In Massachusetts, which has been for a long time the focus of the agitation for and against laws prohibiting the use of intoxicating drinks for any but medical purposes, public opinion last year again showed its former proneness to vacillate between the prohibitory and the license system. The attempts made in that and other States to renew the former experiment of organizing the prohibitionists into a political party resulted in utter failure. That sumptuary laws are not gaining in popularity in this country, the experience of 1869 has clearly demonstrated.

The advocates of the extension of the elective franchise to women worked zealously throughout last year, and, by means of industrious agitation all over the Northern States, succeeded in directing more general attention to their claims. In proof of the practical progress of their cause in 1869, they justly refer to the commendation of it by several Governors; to its formal introduction and discussion in the Legislatures of several of the leading States, and to the adoption of woman-suffrage by legislative enactment in one of the Western Territories (Wyoming).

A discussion of the various systems of minority representation was started by the leading newspapers of Illinois, early in the winter, with a view to bringing the subject before the Convention charged with the work of framing a new constitution for the State. The discussion developed so general an interest in the question, that, soon after the meeting of the Convention in the month of December, several propositions for the representation of minorities, under the new organic law, were formally brought before that body. According to present appearances, the people of Illinois will be asked to vote for either the one or the other of the following two schemes as part of their new constitution:

"In all elections for choice of Senators or Representatives, each qualified voter shall be entitled to as many votes as there are Senators or Represen-

tatives to be elected by the same constituency, and may distribute his votes equally or unequally among the candidates, or concentrate them upon one, at his option (but he shall not give any smaller or other fraction than one-half a vote to any candidate); and the candidates receiving the greatest number of votes shall be declared elected."

"In the election of all officers in this State, whether executive, legislative, judicial, or ministerial, whenever more officers than one are to be elected by the same constituency for the same office, and for the same time or term of service, each voter shall be entitled to as many votes as the whole number of officers to be chosen by the same constituency, to the same office, for the same time or term of service."

The prospect of a practical trial of minority representation, in one of the most flourishing States of the Union, can be but gratifying to all who believe that government, like every other human interest, is capable of steady progress.

In other parts of the North-west, a promising agitation in favor of various administrative reforms was carried on in 1869. It is certainly remarkable that, in this pre-eminently progressive country, the utmost conservatism should prevail as regards the existing clumsy machinery of local administration, which has descended to us from former centuries, and has continued in operation since its adoption from the mother country, with hardly any improvement. The agitation has not as yet resulted in any definite reform, but sooner or later the forms of local government will surely be made to keep pace with the general advance of the country.

The recent fearful disasters in the mining districts of Pennsylvania resulted in a movement in that State for more efficient legislative protection for the lives of miners. A bill for that purpose has already been introduced in the State Legislature.

Besides the subjects mentioned, the prevailing abuses of the pardoning power, the administration of civil and criminal justice, the noxious operation of the divorce laws in some of the States, and various propositions for checking the mischievous influence of great corporations, were seriously considered in different parts of the country, without, however, passing the stage of mere discussion.

No reforms received more earnest consideration, in 1869, than those relating to public economy. The decided reaction against direct and indirect repudiation, which began in the preceding year,

culminated in an overwhelming public sentiment in favor of national honesty, which found its expression in the almost unanimous condemnation of all attempts at repudiation, by the Federal Legislature. The true causes of our chronic financial and commercial troubles also began to be more generally understood. The conviction that the proper remedy for the many evils growing out of our superabundant currency was contraction, and that the way to a resumption of specie payments lay through it alone, slowly, but surely, gained ground. There is, it cannot be denied, a good deal of delusion prevailing yet, even among the more intelligent classes. But what with the practical lessons taught by the disturbing effects of our unsound monetary system upon every kind of business, and the earnest advocacy of the only wise and safe line of policy by the leading newspapers, as general a change in this respect may be expected to set in ere long as on the subject of repudiation.

The question of tariff legislation likewise commanded great attention, and led to an extensive enquiry as to the economic laws, the adoption of which would best conduce to a healthy development of our national resources. The agitation of this subject, though exceedingly animated, was evidently but the prelude of the mighty struggle between protectionists and free-traders, of which the United States will no doubt soon be the theatre.

The State of Massachusetts last year followed the example of the States which have provided themselves with Boards of Railroad Commissioners as guardians of the interests of the public against the encroachments of railway companies. The composition of the Massachusetts Board warrants the expectation that it will contribute more towards the solution of the problem of the proper economic relations of railways than any other body of the kind already in existence.

No economic question received more general attention than that of foreign immigration. Throughout the West and South the problem how to secure a more general distribution over the country of the 352,000 immigrants that poured into the United States from Europe and Asia, was seriously considered. There was hardly a State west of the Alleghanies and south of the Potomac that did not adopt some practical measures for securing a share of the vast influx of foreign laborers. But owing to the still unsettled condition of the Southern States, the great mass

of European immigrants again flowed into the West and Northwest. The subject of Chinese immigration assumed direct importance to the whole country east of the Rocky Mountains, upon the completion of the great transcontinental railway to California. It was thoroughly discussed in the press, and at the meetings of various commercial bodies. The discussion prepared the public mind for the advent of large numbers of Chinese in the valleys of the Missouri and Mississippi, which failed, however, to take place. The scheme hatched at the commercial convention, held at Memphis in the summer, at which Southern interests were mainly represented, for the importation of Chinese as indented laborers on a large scale, fell through upon the demonstration of its impracticability under the laws of the United States. It was only just at the close of the year that the Asiatic labor element put in a first appearance upon the Eastern stage, under the management of a Southern contractor, who brought a few hundred Chinese overland from California for employment on a Texas railroad. His example will very probably be largely followed in 1870.

As regards the current of domestic popular migration, the same reasons that diverted European immigration from the South directed the constant movement of population from the Eastern and Middle States almost exclusively to the West and Northwest. In the South, a peculiar migration was observed in the course of the year. Of the white population of the cotton States, large numbers removed to Western Texas, Arkansas, Missouri, Kansas, and other distant States. On the other hand, there was an efflux of tens of thousands of able-bodied blacks from Virginia to the cotton States. Before the abolition of slavery, Virginia supplied the constant demand of the cotton and sugar States for more labor by a regular internal slave-trade. Now the same demand is supplied by the voluntary migration of the emancipated blacks.

A national convention of Irish Emigrant Aid Societies was held in the fall, at St. Louis, for the purpose of devising measures for encouraging and aiding Irish immigration. But not much practical good seems thus far to have grown out of this movement.

As in all other civilized countries, the labor question occupied a large share of public attention in the United States in 1869.

In spite of the continuance of the high rates of wages of former years, and of the lower prices of some of the necessaries of life, the discontent of the working classes appeared to be even greater than in any previous year since the collapse of the Southern rebellion. Strikes innumerable, comprising all trades, occurred all over the country. That of the Pennsylvania coal-miners, in the summer, which resulted in a compromise with the employers, was perhaps the most disturbing to the country at large. The various organizations of the workingmen labored very actively to remedy their alleged wrongs. Their efforts for the enactment of laws limiting a legal day's work to eight hours—about the only well-defined object they seemed to have—were continued in many of the Northern States, without, however, much apparent effect. To secure legislative recognition of their demands, a movement was inaugurated to provide the working classes with a powerful instrument of political influence, by the formation of a regular labor-reform party throughout the country. Steps to effect this object were actually taken; but, owing to the evident want of sympathy of the great body of workingmen, the project of building up a national organization for political purposes remained far from realization. In several Northern States, labor-reform organizations appeared in the political arena previous to the elections of last fall, and assumed the character of distinct parties by nominating candidates of their own for State and local offices. But with the exception of one State—Massachusetts, where the "labor-reform" State ticket received some fifteen thousand votes, by which thirty representatives were elected to the Legislature—these attempts resulted in the sorriest of failures.

Numerous meetings and conventions were held by workingmen in different parts of the country, in furtherance of their aspirations. At not few of these gatherings, the leaders exhibited an ignorance of the very first principles of social economy, coupled with an opinionated spirit, a defiance of common sense, a readiness to accept and advocate the wildest theories of European socialistic schools, and in general a proneness to demagogism as lamentable as the apparent blind acquiescence of their followers in their teachings. There were, it is true, some creditable exceptions; but, considered as a whole, the record of the public discussions of the labor question by laboring men but confirmed the truth demonstrated in former years, that our working classes are not a

whit more advanced than those of the Old World, as regards intelligent understanding of their real wants, and the best means to meet them.

Of the various conventions, the most noteworthy were the National Labor Union Convention which sat in the latter part of August, in Philadelphia, and the National Colored Labor Convention, held in the last month of the year, in Washington.

The Philadelphia Convention was in session for six days, and attended by about ninety delegates, who claimed to represent the following organizations:

Trades.	No. of Organizations.	No. of Members.
Carpenters and Joiners,	77	6,000
Cigar-makers,	95	5,000
Bricklayers,	70	15,000
Typographical Union,	112	14,000
Knights of St. Crispin,	147	50,000
Coopers,	20	5,000
Plasterers,	18	12,000
Iron-moulders,	204	17,000
Machinists and Blacksmiths,	120	10,000
Grand Forge of the United States,	48	1,600
Engineers,	11	621
Tailors,	35	2,000
Locomotive Firemen,	35	2,000
Masons,	8	2,000
Painters,	3	1,500
Metal-workers,	7	850
Miners,	30	38,000
Total,	1,040	182,571

Both women and colored men were readily admitted to the convention as delegates, which commendable action contrasted most favorably with the prejudices and jealousies formerly exhibited by workingmen on similar occasions.

At the opening of the Convention, a report from the Organizing Committee was read, which formed a curious mixture of unblushing self-adulation, pointless declamation, immoderate denunciation, and ill-defined demands. The staple of that remarkable production consisted of such *ad captandum* bombast as this: "We are here the living, embodied element of national greatness and republican strength. The same influence which

went forth at Bunker Hill, and conquered at Lexington and Brandywine, speaks out the same unmistakable ring which there struck out for freedom. . . . We come to destroy all monopoly which holds the force of money and the control of certain lines of transportation, and to crush for ever the spirit and power which blocks up and compels the great West to pay tribute to the now exhausted vampire of the East and the Atlantic. . . . There are two echoes in the gulf which divides us: On one side, we hear the nation's promises to pay honorably; on the other, we hear repudiation; and of the latter term, which seems to shock these patriots, let us say more. It is not the voice of the few who have grown desperate and reckless; it is the sober second thought of the old men of our time, who look out into the darkness about us, and know in their souls there is no hope for the generation who shall follow them, naught but one sure gliding into decay and destruction."

The first two days of the Convention were spent in a discreditable wrangle over the organization, and in disposing of a series of mostly senseless resolutions. The remainder of the session was mainly devoted to referring a variety of subjects, including organization, the platform, co-operation, mines and mining laborers, Chinese immigration, and convict labor under the contract system, to committees, and to receiving, discussing, and voting upon their reports. The Committee on Organization reported a plan intended to perfect the already existing organization of State Trades-Unions under the general direction of the United States Labor Union. The Committee on the Platform reported a declaration of the principles and objects of the National Labor Union, consisting of a long and high-flown preamble, and a series of resolutions, proclaiming:

1. Opposition to the existing monetary system in general, as tending "to subvert the Government, and establish on its ruins an empire in which all political power will be centralized to restrain and oppress the rights of labor, and subordinate its votaries to the merciless demands of aggregated capital and supercilious authority."

2. Opposition to the National banking system.

3. Opposition to the continuation and creation of banks of issue by either State or National authority.

4. Opposition to the prevailing rates of interest.

5. Opposition to the Federal revenue laws in their present form, as subordinating labor to capital, while they should protect labor and the industrial interests of the whole country.

6. In favor of making legal-tender money a lawful tender in the payment of all debts, public and private; and convertible into three per cent. Government bonds, which bonds should be reconvertible into legal-tender money.

7. In favor of paying Government bonds in greenbacks.

8. In favor of taxing bonds and securities of every description.

9. Opposition to the existing land system, as incompatible with the principle that "all freemen when they form a social compact are equal in rights," and as tending to subvert "free institutions and the social and political well-being of the laboring masses."

10. The "duty which should be exercised with pleasure, to guard with vigilant care the delicate and sacred rights of the daughters of toil engaged in various industrial pursuits."

11. The necessity of the better education of the working classes by the formation of Labor Unions, Mechanics' Institutes, Lyceums, Reading-rooms, and similar agencies.

12. In favor of an establishment of a department of labor at Washington, as part of the Federal Government.

13. In favor of co-operation as "a sure and lasting remedy for the abuse of the present industrial system," the adoption of which workingmen will find to their advantage "until the laws of the nation can be remodelled so as to recognize the rights of men instead of classes."

14. In favor of taxing the wealthy classes only, for the prosecution of wars.

15. In favor of the adoption of such measures among all classes of workingmen, in all sections of the country, as will secure the adoption of the eight-hour system throughout the United States.

16. The right of associations of working men and women to the same chartered rights and privileges at the hands of legislation that are granted to associated capital.

17. In favor of restoring every American citizen, except those guilty of felony, to the full enjoyment of civil and political rights.

This platform, so strangely combined of sound and rotten planks, was readily accepted, after slight and unavailing opposition to the sixth resolution.

The Committee on Mines and Mining Laborers presented a report on the great strike of Pennsylvania coal-miners then progressing, which, to the great credit of its framers, calmly stated the miners' side of the case.

The report of the Committee on Co-operation constituted one of the redeeming features of the Convention. It recommended, even more strongly than the platform, the general adoption of the different methods of co-operation by working men and women as a means of improving their material condition. On the strength of this report, the President of the National Labor Union was authorized to employ lecturers for the instruction of the Trades-Unions in the theory and practice of co-operation.

The Committee on Chinese Immigration made a strong report against the importation of indented laborers into the United States, which was adopted. The Committee on Convict Labor adduced the usual shallow arguments against the employment of convicts as industrial producers, which the Convention unhesitatingly endorsed.

Far more sensible than the deliberations of the Philadelphia Convention were the proceedings of the National Colored Labor Convention, which met in Washington, on December 8th, and continued in session for five days. The object of the Convention was to effect an organization of colored laboring men throughout the United States, by which their education should be promoted, the recognition of their claims to admission to every useful pursuit urged, and in general the improvement of their intellectual, moral, and material condition obtained. The movement, as the first of the kind attempted by the colored people, attracted a good deal of attention, and the proceedings of the Convention were eagerly watched. In organizing the body, it was found that one hundred and fifty-six delegates were present, representing the States of Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, North Carolina, Georgia, Alabama, Florida, Louisiana, Tennessee, Ohio, Michigan, Nevada, and the District of Columbia. The organization was completed without any difficulty on the first day. A declaration of principles was adopted on the second

day, in which the following propositions, contrasting most favorably with the platform of the Philadelphia Convention, were set forth:

1. That labor is a duty common to, and the natural heritage of, the human family; that each person has a natural right to labor in any field of industry adapted to his or her capacity, which right is restricted only by the laws of political economy.

2. That there is no necessary conflict between capital and labor; that strikes may be avoided, and the interests of employers and employed reconciled.

3. That co-operation is a sure and safe method of improving the condition of the working classes.

4. That intemperance is the natural foe and curse of the American people, and especially of the American working classes.

5. That popular education is the strongest safeguard of republican institutions, and that hence a liberal free-school system should be established for the benefit of the whole people throughout the country.

6. That loyalty to and love for the institutions and Government of the United States can be best fostered by granting equal political and civil rights to all classes of the people in every State.

7. That gratitude is due to Divine Providence for the immense natural resources of the United States, which enable labor to find its just reward, and make this country a safe refuge for the oppressed of all nations.

8. That the colored people owe it as a duty to themselves, and to society at large, to promote education and industrious, economic, and temperate habits among their race.

9. That the rights of labor being equal everywhere, the exclusion of colored men and apprentices by the "Trades-Unions" from the right to labor in any workshop in the United States is a disgrace to humanity.

10. That the importation of coolie laborers into the United States is but an attempt to revive slavery, and hence the strict enforcement of the law of Congress prohibiting such importation is imperatively demanded.

11. That the thanks of the colored people are due to the Congress of the United States for the establishment and maintenance of the Freedmen's Bureau, to the officers of the Bureau,

and to philanthropists throughout the country, who have been instrumental in providing the emancipated people of the South with educational facilities.

12. That faithful obedience is due by the colored people to the laws of the United States and the several States; that all grievances, public and private, should be carried before the proper tribunals; that armed resistance against the laws is unjustifiable, and deserving of summary punishment.

13. That the colored workingmen should form organizations in every State and Territory for co-operation with the Bureau of Labor which the National Labor Union proposes to establish for the promotion and protection of their interests.

The labors of the Convention were mainly directed to the maturing of plans for the organization of the National Labor Union and the Bureau of Labor, which, as announced in the platform, is to constitute a central agency for the advancement of the interests of colored workingmen throughout the country. The proceedings were remarkably free from empty discussion, which, considering the novelty of the movement, would not have been surprising in that body. Some very interesting papers on freedmen's savings-banks, the progress of education among freedmen, the abuses of freed agricultural laborers by employers in the cotton States, and other subjects, were read on different days. The sittings were enlivened daily by addresses from well-known public men, in which they gave due encouragement to the efforts of the Convention. Previous to the adjournment, an address was prepared, in which the purposes of the National Labor Union and the Bureau of Labor were fully explained to the public at large. The address reiterated the propositions set forth in the platform, with a commendable addition in the form of a positive declaration urging the payment of the national debt in accordance with the letter and spirit of the law, pledging the fruits of the industry, as well as the influence and votes, of the colored working people for the honest discharge of the national obligations, and refusing to co-operate with any political or other party favoring repudiation. The language of parts of the address was rather fulsome, but its form and spirit, as a whole, were very creditable to its authors. The following passage contains the gist of the document:

"But, for our own good, and the welfare of our country in all things pertaining to her material and moral well-being, we seek a better and broader opportunity to gain knowledge in the fields of agricultural, mechanical, commercial, artistic, and professional labor; and this knowledge we would energize, direct, and make more largely effective through the enlightening and sanctifying influences of education. Our mottoes are liberty and labor, enfranchisement and education! The spelling-book and the hoe, the hammer and vote, the opportunity to work and to rise, a place on which to stand and to be and to do, we ask for ourselves and children, as the means in the use of which, under God, we are to compass these achievements, which furnish the measure, the test, and justification of our claim to impartial treatment and fair dealing.

"That this end may be reached, we ask, first of all, that trades be opened to our children, and that they be given the benefit of a just and equitable system of apprenticeship; in the second place, that for every day's labor given we be paid full and fair remuneration, and that no avenue of honest industry be closed against us; and, thirdly, since we believe that the intelligence, the elevation, and happiness of all peoples depends in no small degree upon the diversity of their industrial pursuits, we ask that we may work in the printing-office, whether private or governmental; in the factory, the foundry, the workshop, upon the railroad, the canal, the river, the steamboat, in the warehouse, the store. Wherever labor is to be done, and an able and faithful workman is wanted, we conceive that we may claim a place, without distinction as to former condition, since all that can be demanded by the employer is ability, the faithful performance of the contract made; and the employed, reasonable treatment and the compensation promised."

A proposition was brought before the Convention for the establishment, under the direction of the General Government, of a special land-office, whose functions should be to facilitate the acquisition of public and private lands by freedmen. As far as it appears from the published records of the Convention, the proposition was not entertained. This would indicate a clear comprehension, on the part of the Convention, of the fact that it will be better for the freedmen in the end to depend in the future for their material improvement on their own efforts rather than on the assistance of the Government, and that public opinion inclines strongly to this view.

Co-operation, in its different forms, made relatively little practical progress in the United States last year. Comparatively few new co-operative enterprises were started, and, with rare exceptions, no very brilliant results achieved by the already existing ones. Even in Massachusetts, where co-operative experiments

have been more largely made than in any other State, under the impulse of special legislation, the official record of co-operation, although containing some striking instances of success, was not very gratifying as a whole. The most promising advance in co-operation of the year was the adoption by a number of leading Eastern manufacturers of the system of industrial partnerships in their establishments.

The numerous commercial conventions in 1869 afforded strong illustrations of the growing importance attached to the grave economic problems before the country by the mercantile classes. Their principal representative gatherings were held at Keokuk, Norfolk, New Orleans, Memphis, Louisville, and Richmond. The most numerously attended were the National Conventions at Louisville and Richmond, at which latter place the National Board of Trade had a very successful session in December. The meetings at Keokuk, Norfolk, and Memphis had a more local and sectional interest.

In the sphere of *Public Education*, there were also many evidences of progress in 1869. One of the most interesting of these was the inauguration of a broader system of higher instruction at the oldest university in the country. It is some years since reformatory tendencies first became manifest at Harvard University, but it was only after the election of the present President, last spring, that they assumed the shape of a systematic attempt to assimilate the methods of post-graduate instruction to those practised at the German universities.

As intimately connected with higher education, two almost simultaneous movements, in Boston and New York, for the establishment of Museums of Art, deserve to be mentioned. That at Boston was initiated partly through the agency of this Association, and reached such a stage before the end of the year as to warrant the hope that the first Museum of Art will rise in the metropolis of New England in 1870. The movement in New York was inaugurated with considerable *éclat* at a public meeting, in which a number of persons, eminent in art and literature, took a leading part.

The long-mooted subject of the admission of women to universities and colleges entered a phase in 1869 which may be considered a close approach to a final solution. The doors were thrown open to them at Harvard University, at the State

University of Michigan, and other institutions. In some quarters the privilege was yielded only after a more or less severe struggle. With the advantages already gained, the day cannot be far distant when no one will any longer dispute the right of women to enjoy equally with men the highest educational facilities.

A new feature in technical education in the United States was introduced by the opening of extensive workshops, where students can become familiar with the practical applications of mechanical arts, at the "Free Institute of Industrial Science," at Worcester, Massachusetts. No other American technological school possesses, we believe, this decided advantage.

A movement was set on foot in the latter part of the year at Boston, for the foundation of a National Institute for the Blind, where that class of unfortunates shall find opportunities for collegiate instruction. The project is in the best hands, and will, no doubt, be carried out.

The Legislature of Connecticut, at its last session, passed a law for the purpose of compelling the education of children. Its provisions are not limited, as in other States, to manufacturing and mechanical establishments, but apply equally to merchants, farmers, and all others who employ children. It requires sixty days' schooling each year as the legal condition of employment of minors, and fixes a penalty of $100 for each and every violation of this provision. The leading employers in the State have readily complied with the new law, which has already resulted in largely increasing the number of children receiving instruction in the public schools.

The question of connecting industrial schools with the regular public schools received serious attention from the city authorities of Boston. The City School Board have endorsed the proposition for an experiment by establishing two industrial schools, one for boys and another for girls, but have not yet agreed upon a definite plan of organization.

In the same city, a free public school for deaf and dumb children was recently opened. A number of leading residents of Boston also took steps for the establishment of a horticultural school for women.

The Annual National Educational Conventions took place in the month of August, at Trenton, New Jersey, and were attended

by more than a thousand educators from thirty different States. The chief feature of the proceedings of the National Superintendents' Association was an emphatic expression in favor of a National Department of Education. At the meeting of the American Normal Association, a committee of three was appointed to report upon the condition of admission and course of training best adapted to the purposes of normal schools, and to prepare a series of questions calculated to draw out the views of the members of the Association upon the same subjects. The National Teachers' Association was in session for three days. Resolutions were passed asking Congress to give substantial aid, by land grants or otherwise, to the educational interests of the Southern States; disapproving of the teaching of partisan or sectarian principles in public schools, and the appropriation of public funds for the support of private schools; and recommending the assignment of a proper place to sacred literature, and especially the Bible, in the course of study at academies, colleges, and universities.

In sanitary administration, the most important advance was the institution in Massachusetts of a State Board of Health, intended to secure to the State at large the same benefits that local sanitary boards confer upon cities and towns. It is the first body of the kind established in this country.

The promoters of reform in prison administration in this country have taken the initiatory steps for an international prison convention to be held in this country in 1871. It is to be preceded by a National Prison Convention, which will meet at Cincinnati, in the fall of 1870. Of this promising movement, as well as of the progress in public charities in general, detailed accounts are given hereinafter.

As will be seen, several of the subjects referred to in the foregoing review are enlarged upon in the following paragraphs.

Art in Education.—In the first volume of Transactions, it was stated that a special committee had been appointed to consider the subject of art from an educational point of view. This Committee, as finally organized, consists of Messrs. Charles C. Perkins, the well-known student of and writer on art, W. R. Ware, E. C. Cabot, and James M. Barnard, of Boston, and Mr. J. Q. A. Ward, of New York. Mr. Perkins, during a recent

residence of several years in Europe, has collected a large amount of material bearing upon the subject, which he has placed at the disposal of the Committee. An active correspondence has moreover been opened with prominent authorities on art in England, Germany, Italy, and France, from which a number of valuable suggestions as to the best means of promoting art education in this country have been derived.

In the previous note on this subject, it was stated that the Committee referred to intended to place a small collection of plaster casts of the best antiques in one of the public schools of Boston, for an experiment as to the effect of such objects on youthful minds. It is hoped that the Committee will soon carry this plan into practical effect. It is a good illustration of the empirical rather than scientific character of general education in this country, that there is an honest difference of opinion among educators as to the value of this proposed experiment. There seems to be, however, a preponderance of opinion in favor of it. The Committee are in possession of a letter from Mr. Mill, recommending it most emphatically.

In the prosecution of their enquiries, the Committee have become impressed with the feasibility of establishing a regular Museum of Art at a moderate expense. They have prepared the subjoined report, showing how this may be done:

A REPORT FROM THE SUB-COMMITTEE ON ART IN EDUCATION, PRESENTED TO THE GENERAL COMMITTEE ON EDUCATION OF THE AMERICAN SOCIAL SCIENCE ASSOCIATION.

All educated persons will agree that nations as well as individuals should aim at that degree of æsthetic culture which, without passing the dividing line between general and special knowledge, will enable them to recognize and appreciate the beautiful in nature and in art.

There are undoubtedly different degrees of capacity for such appreciation, and special aptitudes for the representation of certain manifestations of beauty, either in form, as among the Greeks, or in combinations of color, as among the Orientals. It is owing to this that Grecian statues and Persian carpets show a perfection resulting from an instinctive obedience to the highest laws of beauty, to which nations less favored by nature labor in vain to attain.

But there exists a modicum of capacity for improvement in all men, which can be greatly developed by familiarity with such acknowledged master-pieces as are found in all great collections of works of art. Their humblest function is to give enjoyment to all classes; their highest, to elevate men by purifying the taste and by acting upon the moral nature; their most practical, to lead by the creation of a standard of taste in the mind to improvement in all branches of industry, by the purifying of forms, and a more tasteful arrangement of colors in all objects made for daily use.

The Roman *contadino* who visits the Vatican, the French *ouvrier* who frequents the galleries of the Louvre, or the English journeyman who goes to the British Museum, finds himself in the presence of forms of beauty which he cannot, indeed, wholly appreciate, but from which he nevertheless receives a certain amount of pleasure. To say the least, he is diverted from sordid cares, and lives for a short period in a higher region of thought than that to which he is accustomed in his everyday existence; while the intelligent artisan learns from them a thousand lessons which act upon his mind with fertilizing power, because it has been prepared by previous training to receive them.

We cannot permit ourselves for a moment to doubt that a people so quick to receive impressions as the American, is as capable as any other of deriving enjoyment, as well as intellectual, moral, and technical improvement, from influences of a like nature. It does not know how much it needs them, because it has never felt them; nor can we estimate the effects which the supply of such influences might produce upon it, for, as yet, they have not been brought to bear. We feel, however, the immense importance of giving our people every facility for improvement when we hear the startling fact that a body of French workmen skilled in decorative art came over to this country to exercise their industry, and, finding themselves daily losing ground on account of the total absence of museums containing objects calculated to stimulate and inspire them, felt themselves obliged to return home. The question is, How can the existing want which these men felt to be fatal not only to their progress, but even to the maintenance of their already acquired skill, be supplied? We answer, By

the establishment of a Museum of Art of the character of that at South Kensington. Modest in its beginnings, though all-embracing in its aims; attempting only that which it can thoroughly well accomplish; and striving only for those things which are attainable. We would have it maintain such relations with other institutions as may enable it at the outset to command the confidence of the public in the high character of its aims, in the future efficiency of its organization, and in its assured permanency.

We would propose that it should be governed in all matters of business by a General Council representing many well-established interests; and in all matters of art, by a Central Board of acting managers, composed of a fixed number of artists and other gentlemen selected with reference to their fitness, and presided over by a General Director. Thus the General Council would have it in its power to criticise and check mismanagement; while the Central Board would be left free to select plans for building, to decorate halls and courts, to point out objects of art for purchase and locate them when obtained, and to carry on a correspondence upon art subjects at home and abroad.

We would furthermore suggest that the institutions affiliated with the new Museum might actively contribute to its formation, by making it a place of deposit for works of art belonging to them, loaning to it their statues, casts, pictures, and engravings, so long as these can be properly placed and cared for. In order to raise funds for the erection of the buildings, for which we have prepared a plan, made with special reference to progressive additions, and to the strictest economy compatible with safety and convenience, we would advise that a committee of gentlemen should be appointed to distribute a printed exposition of the proposed organization of the Museum among all persons likely to give support to the project, and to solicit their subscriptions; and also that a Loan Exhibition in aid of the funds should be opened in a suitable place, to which public bodies and private persons should be invited to contribute works of a purely artistic character, as well as those which illustrate the application of the arts of design to industry.

In regard to the class of art objects with which we should propose to stock the proposed Museum, there can be but one

opinion. As its aims are educational, and its funds are likely to be for some time limited, these objects must be such as are to be obtained at once at a moderate expense, and of such a nature as to place the institution on a high ground in the esteem of the community as a means of culture to the public, of education to artists and artisans, and of elevated enjoyment to all. Original works of art being out of our reach on account of their rarity and excessive costliness, and satisfactory copies of paintings being nearly as rare and as costly as originals, we are limited to the acquisition of reproductions in plaster and other analogous materials of architectural fragments, statues, coins, gems, medals, and inscriptions, and of photographs of drawings by the old masters, which are nearly as perfect as the originals from which they are taken, and quite as useful for our purposes.

It has been estimated that for the sum of $100,000 a suitable and sufficiently handsome building could be erected, and filled with a very comprehensive collection of casts by which the entire history of plastic art may be illustrated at an extremely moderate outlay, and much more completely than it is in any single gallery in the world, and of photographs of infinite interest and value to the public as well as to the artist. Such cheap, enduring, and absolutely faithful reproductions, which, when arranged in strict chronological order, and explained in a carefully prepared catalogue, would afford materials for the study of history, archæology, mythology, palæography, glyptography, and iconography, could not but prove most efficacious means for the creation of that high standard of public taste of which we so much feel the want in this country. We feel certain that such a collection would rapidly become self-supporting, even with one or two days' free admission a week. To quote the pertinent words of an American writer, "Were one of our great towns to own a great museum, visitors would flock there from all parts of the Union in such numbers as would soon repay its outlay, and leave it, as it were, a free gift to posterity, with a prolific income for the benefit of the citizens at large. The pecuniary gain would be none the less, because chiefly flowing in from indirect sources. Providence so regulates cause and effect that the best things morally, intellectually, and æsthetically, are certain of the best consequences, in not merely these respects, but ultimately in material well-being. To use an expressive American

phrase, Central Parks 'pay.' So do national museums, as that city will discover which is the first to found one on a Central Park scale of organization and administration."

Being well acquainted with the great collections of casts in Rome, London, Paris, Berlin, and Dresden, and having in our possession catalogues of casts for sale at marked prices in these cities, together with a number of bills for casts purchased for the Art Museum at New Haven, we have prepared a catalogue of those which it would be advisable to purchase for such a museum. Each department of art represented in the collection might have a foreign correspondent attached to it, whom it would be very easy to select, as every great European city contains men qualified by education and experience to give advice upon matters connected with their special departments. We are prepared to present a list of such persons whenever it may be needed.

We cannot bring this report to a close without expressing our sense of the great responsibility which rests upon us, and upon all persons who, like us, desire to aid in the formation of Art Museums in this country, not only in view of their possibly incalculable effects upon the people of the cities where they may be established, but also because no one can tell how widely the initiative there taken may be followed throughout the immense extent of our great Republic, which has as yet to make for itself a name among art-loving nations.

In behalf of the Committee,

C. C. PERKINS, *Chairman.*

PROGRESS IN HIGHER EDUCATION.—In a subsequent part of this volume, a practical illustration is given of the unsurpassed opportunities for higher instruction offered at the leading university of Germany. It is not too much to say that no other centre of academic lore in the Old World can boast of so imposing an array of varied erudition as is found to-day, and has been found for many years, among the instructors attached to the Frederick William University of Berlin. If we enquire to what this great seat of learning, the creation of which dates back only to the early part of this century, owes its past and present eminence, the answer must be:

1. The recognition by those who organized it of the solidarity,

or dependence upon one another for progressive growth, of the several academic disciplines, and hence an equal care for the development of them all.

2. The traditional policy of strengthening the several faculties constantly with the best teaching force that can be attracted from any quarter.

3. The incorporation in the university organism of the principle of free competition for the honors and profits of academic professorships, the practical operation of which is restricted only by a rigid requirement of proper qualifications, natural and acquired.

4. The absolute freedom of the instructors in the sphere of their respective disciplines, both as to the matter taught and the methods of teaching, with its logical sequence—the free election by the students of disciplines and of instructors.

5. Compensation by both fixed salaries and fees, which, while ensuring cheap instruction to students, acts as a healthy stimulus to the instructors by rendering their income dependent on their efficiency.

Concentrations of learning such as are found at Berlin and other European universities are the privileged outgrowths of older civilizations, and hence unattainable in so youthful a country as our own. But it is in our power to open the way for the gradual development in the United States of universities in the noblest and broadest sense of the term, by adopting for such of our institutions as aspire to the rank of universities the organic principles of their most successful prototypes abroad.

This truth begins to be clearly understood here by those who are sensible of the rareness of thorough culture among us, and of the necessity of giving more depth and breadth to secondary education in this country. Of the indications of this fact none are more gratifying than those coming from the institution which a relative abundance of efficient means of higher instruction, no less than age, entitles to the first position among American universities and colleges. The following passage from the inaugural address of President Eliot shows very clearly that the new head of Harvard University fully comprehends the necessity, in order to bring the venerable institution under his charge nearer to the standard of a true university, of recognizing and establishing in practice that co-ordination of the various elements of men-

tal culture which constitutes the main source of the strength of the German universities:

"The endless controversies whether language, philosophy, mathematics, or science supply the best mental training, whether general education should be chiefly literary or chiefly scientific, have no practical lesson for us to-day. This university recognizes no real antagonism between literature and science, and consents to no such narrow alternatives as mathematics or classics, science or metaphysics. We would have them all, and at their best. To observe keenly, to reason soundly, and to imagine vividly are operations as essential as that of clear and forcible expression; and, to develop one of these faculties, it is not necessary to repress and dwarf the others. A university is not closely concerned with the applications of knowledge until its general education branches into professional. Poetry and philosophy and science do indeed conspire to promote the material welfare of mankind; but science no more than poetry finds its best warrant in its utility. Truth and right are above utility in all realms of thought and action."

As regards the constant recruitment of fresh forces for the several faculties, by which foreign universities maintain and increase their vitality, like re-enforcement of our own universities and colleges is out of the question, for the simple reason that our supply of the right material is incomparably more limited than that of the leading European countries. But, on the other hand, the faculties of our universities and colleges do not contain all the talent and knowledge among us which might be made to contribute to their strength. On the contrary, it is undeniable that there are men, not a few, in this country who, although fully competent to fulfil the part of university teachers in certain disciplines, have never aspired to become such, owing partly to the insufficient compensation of professors even at our best endowed institutions, and partly to the low estimate which is as yet placed upon learning in general by the great body of our people. There seems to be no better means of attracting these men to an academic career than the adoption of the vitalizing principle of the German universities—of free competition for academic positions, and the compensation of lecturers by fees. This will be merely applying to our system of higher education the common rule of our social life, under which the freest chance is given to individ-

ual worth in all fields of human activity, while at the same time the danger of only opening the door still wider to mediocrity and charlatanism can be easily avoided by appropriate safeguards.

That such a reform will be sure to draw out now unavailable resources is shown by the practical example to which reference is made below. It cannot be expected, however, owing to the scarcity of erudite men among us, to furnish anything like an adequate supply of university professors of a high order. But while it will not fully meet our great want in this regard at once, it will, just as the same practice has done in Germany, prove the seed of a richer crop hereafter. Only let free access to distinction and proper remuneration in the academic profession be assured to true merit, and we shall soon observe among our youth a greater love of solid knowledge for its own sake; a greater willingness on the part of the more talented of our college and university students to devote their lives to academic pursuits; and, as a natural fruit of this, a constant and abundant aftergrowth of original investigators and producers from among the best capacities, such as constitutes the glory of and a permanent source of vigor to the German universities.

The friends of intellectual progress in this country have reason to rejoice that Harvard University has taken the lead in the improvement of our system of higher education. It is generally known that already, under the predecessor of President Eliot, a beginning was made in providing post-graduate instruction in disciplines other than those comprised in the lectures at the Divinity, Scientific, Mining, Law, and Medical Schools. But the "university lectures" instituted by President Hill were rather limited in their range and did not prove a great success. Upon the accession of President Eliot, two "University Courses of Instruction"—one in "Philosophy" of six courses, and another in "Modern Literature" of seven courses of lectures—for "graduates, teachers, and other competent persons, men and women," were added to the "university lectures." Both university courses, which have been progressing since the opening of the academic year 1869–70, have been eminently successful in every respect but the attendance, which is small, owing to the high charge of $150 per course. For the academic year of 1870–71, an entirely new arrangement of university lectures is announced. The "university lectures" and "university courses" are to be

thrown into one, and the foundation laid for something like a "philosophical faculty" in the broad sense of the German universities. The new university course will include the following disciplines: Natural Science, Theology, Political Science, Metaphysics, Modern and Ancient Literature, Mathematics and Astronomy, History and Art. As at the German universities, moderate fees will be charged, namely, ten dollars for longer and five dollars for shorter courses of lectures. All respectable adult persons—men and women—will be admitted, and allowed to follow any course or courses they may elect. This placing of both sexes on an equal footing is a decided step in advance of even the German rule regarding admission and election of studies.

According to the published programme, twenty-nine lecturers have already been selected for as many courses, namely, Professors F. H. Hedge, James Russell Lowell, F. J. Child, E. J. Cutler, G. M. Lane, W. W. Goodwin, E. Abbot, E. A. Sophocles, H. W. Torrey, Francis Bowen, C. S. Peirce, Louis Agassiz, Jeffries Wyman, N. S. Shaler, R. Pumpelly, J. B. Perry, J. Winlock, Benjamin Peirce, and J. M. Peirce, and Messrs. G. E. Ellis, C. C. Perkins, F. Bocher, W. D. Howells, A. Phelps, C. Wright, J. Fiske, J. E. Oliver, B. J. Jeffries, and W. Everett. The nine lecturers last named, who do not belong to the regular university staff, confirm what has been said above concerning the existence of unemployed capacity in this country, and the possibility of making it available for academic purposes.

As announced, the new university course reveals an unequal representation of disciplines among the lecturing force, and the entire omission of several disciplines which form part of the philosophical faculties of Germany. But these shortcomings are not due to any narrowness of view on the part of the administration of Harvard University, but solely to the practical difficulty of finding instructors representing a wider range of knowledge. The best has probably been done that could be done. If the experiment should prove successful, a still closer approach to the true university will no doubt follow.

International Congress on Criminal Law Reform and Penitentiary and Reformatory Discipline.—At the stated monthly meeting of the Executive Committee of the Prison Association of New York, held in May last, the Rev. Dr.

Wines, Corresponding Secretary of the Association, submitted a paper on this subject. Said paper, after reciting in a preamble that prison discipline constitutes at once a vital interest of society and one of the gravest problems of social science, that this question has awakened a wide interest and been earnestly studied within the present century, that experiments of great value have been recently made in different countries, and that it seems highly desirable that opportunity for conference and a general comparison of views should be ha—states the opinion that the time has come when an International Congress on Criminal Law Reform and Penitentiary and Reformatory Discipline may be successfully inaugurated and held with the best results. The proposition being new and grave, action upon it was postponed for further consideration.

With a view to eliciting opinions that might aid the Executive Committee in its decision, the Secretary, on his personal responsibility, addressed a circular letter to a number of gentlemen, asking their views as to the policy of the proposed conference. More than forty replies were received, mainly from governors of States, wardens of prisons, and superintendents of reformatories, all, with one or two exceptions, strongly favoring the proposition. Mr. Commissioner Hill, of England, said: "I heartily approve of the proposed Congress." Sir Walter Crofton, author of the Irish Prison System, said: "I think that an International Conference, in accordance with your programme, will be of very great value." Mr. Bonneville de Marsangy, of France: "I applaud, with all my heart, your idea of an International Congress." Among American gentlemen favoring the project may be named Ex-Governor Seymour, Hon. Charles Sumner, Gen. Amos Pilsbury, Gideon Haynes, Z. R. Brockway, F. B. Sanborn, Dr. S. G. Howe, and Samuel Eliot, President of the American Social Science Association. Gov. Seymour said: "I think well of the plan of an International Congress on Prison Discipline. I will do what I can to promote the project." Senator Sumner said: "An interchange of opinion and experience on the treatment of prisoners would be of great value." Dr. Howe: "By all means, let us come together."

At the stated meeting of the Executive Committee of the New York Prison Association in June, the question of the Congress was again laid over, with an informal understanding that the

Secretary would continue his correspondence on the subject. Accordingly, a second circular was sent out, of the general tenor of the first, and containing extracts from answers to the same. In reply, one hundred and thirty-two letters were received—thirty-six from foreign countries, and ninety-six from our own. Of those from abroad, seventeen were from England; three from France; two from Ireland; one from Scotland; two from Belgium; two from Netherlands; two from Canada; two from Denmark; one from Italy; and one from Bremen. All of these favor the Congress; most of them strongly. The ninety-six letters from gentlemen in the United States are thus classified: twenty-six from governors of States; two from ex-governors; twenty-four from wardens of prisons; three from other prison officers; twelve from superintendents of reformatories; two from chaplains of reformatories; sixteen from gentlemen connected with penal and correctional institutions, as inspectors or managers; six from gentlemen connected with boards of State charities; and eight from other persons interested in prison discipline. All the governors expressed approval, and promised co-operation; and the other gentlemen, without exception, regarded such a conference as likely to result in much good.

At the stated meeting of the Executive Committee of the Prison Association in September, a committee, consisting of Theo. W. Dwight, Francis Lieber, and E. C. Wines, was appointed to meet a similar committee of the Philadelphia Prison Society, composed of J. J. Barclay, Jos. R. Chandler, and A. J. Ourt, to consider and take action in reference to a *National* Conference on Prison Discipline, to which joint-committee was also referred the question of an *International* Conference on the same subject, for such recommendation as they might think proper to make thereon to the National Congress. The above joint-committee held a meeting in New York on the 22d of November, and passed resolutions affirming the expediency of a National Congress for conference on criminal punishment and correctional discipline; designating the classes of persons of which the Congress should be composed; appointing the time and place for holding the meeting; and recommending the appointment of a joint-committee of arrangements, to consist of five members from each society. This action was reported to the New York Prison Association at its monthly meeting, on the evening of the 25th

November, which thereupon passed a resolution to the effect that it judged it inexpedient to take the initiative in calling the proposed conference at the present time.

The New York Prison Association, having thus declined taking the lead in this movement, the following call has been issued—signed by leading officers of prisons and reformatories, and friends of prison reform, throughout the country: "The undersigned, deeming prison discipline a vital interest of society, and one of the gravest of social problems, and on both these grounds worthy of the closest study and freest discussion, cordially unite in calling a National Congress for conference on criminal punishment and reformatory treatment, to be held in the autumn of 1870, in the city of Cincinnati, the Board of Directors of the Cincinnati House of Refuge having signified that such a conference would be welcomed in that city. [Here follows the nomination of thirteen gentlemen to act as a Committee of Arrangements.] We recommend that the Committee of Arrangements, and the Conference, give consideration to the question of an International Congress on Penitentiary and Reformatory Discipline."

The above call is signed by John David Wolfe, President N. Y. Prison Association; Theo. W. Dwight, Chairman Ex. Com. N. Y. Prison Assoc.; E. C. Wines, Cor. Sec. N. Y. Prison Assoc.; Gideon Haynes, Warden Mass. State Prison; Amos Pilsbury, Supt. Albany Penitentiary; Z. R. Brockway, Supt. Detroit House of Correction; Henry Cordin, Warden Wisconsin State Prison; R. Burr, Warden Ohio State Prison; B. Wardwell, Warden Virginia State Penitentiary; Oliver S. Strong, Prest. Board Managers N. Y. House of Refuge; the entire Board of Directors of the Cincinnati House of Refuge, and some sixty other gentlemen.

The matter has now taken such a shape that the International Congress will undoubtedly be called, and will probably be held some time in 1871 or 1872. We believe that, by collecting and diffusing information, by discussing and settling principles, by quickening the public interest, and educating public opinion on questions connected with penitentiary and reformatory discipline, the Congress will form an era in the progress of this great interest of society.

A National Collegiate Institute and Musical Conservatory for the Blind.—Dr. S. G. Howe, the well-known Director of the Perkins Institution and Massachusetts Asylum for the Blind, has matured a plan—the result of long experience and reflection—for the establishment of an institution where the blind shall receive a higher education than is now offered to them at any existing asylum. The plan is embodied in the thirty-eighth annual report of the Trustees of the Perkins Institution. It has also been brought to the knowledge of philanthropists in different parts of the country by means of a private circular. The plan is a novel but at the same time a perfectly practicable one, and deserves the attention of all who are interested in the welfare of the unfortunate class for whom it is proposed to provide opportunities for higher culture. Dr. Howe, in the report and circular referred to, thus dwells upon the subject:

"There is a general law of nature which causes a certain number of defective children to appear in every generation. A study of this law enables us to predict, with an approach to exactitude, that, under given social conditions, there will be among the next million children born a certain number defective in their bodily organization; and, moreover, that about so many will be blind, so many deaf, so many club-footed, so many hare-lipped, etc.

"The important point is, that the proportion of the whole and of each class is largely under human control, and dependent upon obedience or violation of cognizable laws.

"For instance, the usual proportion of those defective by deafness is about one to fifteen hundred of the whole population of Massachusetts; but in the town of Chilmark, by reason, probably, of intermarriage, it is more than one in fifty.

"Of a million children born in the temperate zone, more than five hundred are born blind, or with organs of sight too feeble to resist ordinary destructive agencies, so that they almost surely become blind. Special researches in certain districts prove that the census underrates the real number. There are probably at least eight hundred in Massachusetts; about two thousand in New England; and twenty thousand in the United States.

"It is easy to teach the blind; hard to teach the deaf.

"Blindness obstructs mental and moral development very slightly; deafness, very gravely.

"Blindness disables the outer man; deafness, the inner man.

"Blindness is the greater misfortune to the poor; deafness, to the rich. Nevertheless, no public provision was made for the instruction of the blind

in the United States until within forty years, and some time after it had been made for the deaf-mutes.

"The example first set in Massachusetts was rapidly followed in seventeen other States, where institutions were organized; to which the legislatures of ten neighboring States made provisions for sending blind children as public beneficiaries. . . .

"These eighteen public institutions for the blind have about one thousand pupils, boys and girls, who remain under instruction from five to seven years. They are taught the common branches of school learning, a little music, and some handicraft. This suffices for the most of them. It makes them equal, perhaps a little superior, to children of their social position in respect to that kind of knowledge acquired in schools. It increases their self-respect and self-confidence. It inspires the wish to keep themselves out of the dependent class, and it greatly increases their chance of doing so. Most of them find some household or industrial establishment in which they can fill a useful place. Their moderate culture fits them for social companionship, and their little knowledge of music is a source of enjoyment to themselves and to those about them.

"In this way the institutions for the blind are doing a great work of beneficence, and lightening one of the heaviest burdens which men are called upon to bear.

"Throughout New England and most of the Middle and Western States, any parents who seek instruction for their blind child can have it; and, if the special school is not near their door, the child is taken to it, kept, and taught, without their being put to more cost than are their neighbors who send their child to the common school.

"Among the numerous graduates of our public institutions, and among blind children who receive elementary education at home, there are a few who have talents, and who, having tasted the Pierian Spring, would fain drink deep. They sigh for means of higher culture than the State institutions afford. They long to read the classics, and to master the literature of their own language, in order to gratify their tastes, to lift themselves to an intellectual level with the best society, and to add to their means of usefulness in life. History furnishes instances of blind children born to wealth, or placed in favoring circumstances, who have become respectable scholars in various departments of knowledge.

"But we need not go beyond the history of our own institution for proof of the capacity of the blind to profit by culture. We fitted for college two boys quite blind from birth. One entered Harvard University, the other Dartmouth College. Both held their own with their class, and graduated in respectable standing. One became a brilliant musician and a successful teacher of music, and gave great promise; but died young. The other has been for several years Principal of the State Institution for the Blind in Tennessee, and has managed his establishment with entire success.

"It is for such as these that we need a National Collegiate Institute for the Blind. Such an institution should be specially adapted to the condition and wants of persons whose sight is partially and temporarily impaired by

disease, and of those who are permanently blind. In it the course of study should be the same as in our best colleges. All instruction should be oral; and the apparatus and modes of illustration be addressed to the touch. It should be supplied with text-books, maps, diagrams, and the like, in raised characters. It should have large collections of models of various kinds, such as weights, measures, tools, machinery, and the like; manikins and models, showing the anatomy of animals and plants, as well as their outward form. It should have collections of shells, crystals, minerals, and the like; models and sections, showing geological strata; philosophical apparatus adapted to the touch; in short, everything that can be represented by tangible forms.

"It would amaze those who have not reflected upon it, to know how much can be done in this way. Saunderson, the blind professor of mathematics in Cambridge, England, not only knew ordinary money well, but he was an expert numismatist, and could detect counterfeits in a collection of antique coins better than ordinary persons could do by the sight.

"Such an institute should have able professors and teachers, with special aptness for adapting their lessons to the condition of their scholars. It should furnish special facilities for the study of languages, ancient and modern; of mathematics, of pedagogy, and especially of music.

"It should be well provided with everything necessary in a good conservatory of music; and have funds for payment of competent teachers. . . .

"The students would come from among the twenty thousand blind persons in the United States, but especially from among the cleverest graduates of the various State institutions for the blind, where only elementary instruction is given.

"The different State legislatures would doubtless pay the cost of educating a select number in the National Institute.

"A little reflection will show what a great advantage generous culture would be to a blind man, even if he were to be only a musician. Let him be ever so accomplished in his immediate art, he is under great disadvantages as compared with his competitors who can see. But if, besides being a musician, he knows the Latin, Italian, and German languages, and has generous culture in other branches of knowledge, he will have advantages which few of them possess, and of course he will be more nearly on a level with them, and more capable of earning a living and enjoying it.

"No money should be invested in a huge pile of bricks and mortar, in which to lodge and board the scholars. It would be better to board them in neighboring families, because all the disadvantages of the method commonly adopted in colleges (which is a cross between convent and barracks) are intensified in the case of the blind. No external influences should favor the tendency which a common infirmity readily engenders, to social segregation of the sufferers, and to a spirit of caste among themselves.

"All that will be absolutely necessary in the way of special buildings will be two structures: one with rooms for lectures and recitations, and for collections of models; another building for music-hall, instruction-rooms, practising-rooms, etc. The buildings could be erected in wood for

$20,000 each, above the cost of land. The first could be provided with a nucleus of collections of models, and of a museum of natural history, for about $5,000; and with printing-press and the means of embossing, for $5,000 more. The collections would almost certainly be increased by donations. The music-hall could be provided with an organ, ten pianofortes, and a collection of musical instruments, for about $15,000. Everything, however, will have to be done in the plainest and most economical manner.

"The question of location should be settled mainly in view to two things: first, easy access to the musical centre of a large city, so that students could constantly hear the best performers and associate with artists. They must breathe a musical atmosphere. There can be no substitute for this. Second, the location must be in view to facilities for attending ordinary lectures upon such branches of science and learning as they would hear with advantage. Cambridge, perhaps, would be the most suitable place in the United States.

"There are certain strong considerations, which intelligent blind persons will appreciate, in favor of having the college entirely separated from an ordinary Institution for the Blind, and being under a distinct board of trustees."

Railway Commissions.—No portion of the economical machinery of modern society is more important—perhaps no portion is so important, as the railway system. Mr. J. S. Mill limits the whole power of man over nature to putting objects in the right position: "This one operation of putting things into fit places for being acted upon by their own internal forces, and by those residing in other natural objects, is all that man does, or can do, with matter. He only moves one thing to or from another. . . . He has no other means of acting on matter than by moving it."* Bastiat declares that it is the great problem of the present "*to bring the price of things in their place of consumption as near as possible to their price in that of production.*"† The one writer defines the means, the other the end; in both cases steam is the chief agent, and the railway is the most important development of steam power. One principle in relation to this leading element of modern progress may now be fairly assumed as established. The railway system is not one which is amenable to the laws of supply and demand; in other words, no community can rely on competition to correct any abuses which may creep into it. The reason of this is ob-

* "Principles of Political Economy," book i. chap. 1, § 2.

† "Political Economy" (Chicago ed., 1869), p. 83.

vious. Cheap transportation is the one great desideratum to cheap supply; the cost of all movement is a tax directly paid by consumers. It is an undisputed law of railway economics that *the cost of the movement is in direct inverse ratio to the amount moved.* It is foolish to talk of any movement of freight being in excess of the capacity of a railway; no such thing is possible. A railway may require additional tracks and rolling stock to meet a demand; but, while an unlimited number of tracks can be laid down, the capacity of a road can be limited only by its terminal facilities—its means of receiving and delivering freights. From these two principles is directly deduced a conclusion which is at the basis of the whole transportation problem: *competition and the cheapest possible transportation are wholly incompatible.* Each new railway involves a new expenditure of capital on which interest is to be paid; a new corps of officials; additional rolling stock, terminal facilities, and construction expenses. *The single chance any given community has of obtaining the cheapest possible transportation is limited by its success in directing the largest possible volume of movement through the fewest possible channels.* This may now be stated as an established axiom in railway economics.

This being the position which any given community occupies towards its railways, they at once become monopolies to be strictly regulated. Unfortunately they have never been so regarded in this country. Into no other portion of our economical system have such grave abuses penetrated. Great lines of railway, on which whole communities depend for their material progress and even subsistence, have come to be regarded as the private property of individuals. They are, in fact, trusts held by individuals for public uses, and subject to certain claims for private remuneration. Regarded as private property, they have been treated as such. The question with their managers has been, not how transportation over them could be made cheapest and yet be remunerative, but upon how large a body of stock-capital the movement over them could be made to pay an annual dividend of six to ten per cent.

This deplorable condition of affairs, affecting the very basis of all modern development, has mainly arisen from the fact that the community has never thought it worth while to protect its own interests, by entrusting them to public officials, whose duty it

should be to study these problems in behalf of the public, and to see that it suffered no detriment. The corporations always secure the best ability the country affords. These men have for thirty years educated public opinion exactly as they desired; the doctrines of private ownership and vested rights have been thoroughly inculcated; all the knowledge on the subject has been confined to them, and legislative bodies, even the most intelligent and honest, have been as clay in their hands. Now that the mischief is in great degree accomplished; now that the lines of transportation have, like the Erie, become a scandal; or, like the New York Central, a fraud; or, like the Pennsylvania Central, a political dynasty; now, at last, the community is awakening to a consciousness of the fact that its trusts have been abused and its best interests jeoparded. The movement, so far as developed, has taken the right direction; the demand is for correct information. Commissions have been organized in various States having charge of the subject. As yet, however, not much has resulted from their labors, and those composing them do not indeed seem to have realized the magnitude of their task. Two of these commissions are now at work in Massachusetts, and the reports embodying the first results of their labors may be expected during the present winter. It is greatly to be hoped that they will throw some light on this very complicated problem.

These commissions are, however, at most, called upon but to consider the interests of individual States. That which they say must have, in great degree, a local bearing. What is more especially needed is a National Bureau taking charge of this subject. A bill providing for such an office was some years ago submitted to Congress by Gen. Garfield of Ohio (39th Cong. 1st Sess. House Bill No. 465). It was, however, defective in many respects. It sought to regulate corporations and confer power on a comptroller, when what was really wanted was only information, and the conclusions derived from careful study. It is not yet time to legislate on this subject; the principles on which legislation must be based are first to be established. It is greatly to be hoped that a commissioner, clothed with no more powers than those now held by Mr. Commissioner Wells on matters of revenue, may soon be provided for by Congress; it is also to be hoped, that, in creating his office, Congress will not, as in the previous case, seek to procure a man competent to deal with

these questions, in behalf of a great nation, on a salary so very inadequate as $3,000 a year.

State Charities.—At the time the paper on Supervision of Public Charities, printed in the first number of this Journal, was read at Albany, but three States had organized boards of commissioners as there recommended—namely, Massachusetts, in 1863, Ohio, in 1867, and New York, in 1868. Since then, Illinois and Pennsylvania have done so, Rhode Island has taken an equivalent course of action, and Michigan has appointed a preliminary commission, which will prepare the way for a board of charities. The Illinois law is based upon that of New York, more than upon the Massachusetts law, perhaps; but while there are eight commissioners in New York, there are but five in Illinois, which is the Massachusetts number. The secretary, in all the States except Massachusetts, is chosen by the board. In New York, his salary is wholly insufficient, being but $1,500; in Pennsylvania and Illinois, it is $3,000, as it is now in Massachusetts. In Ohio, we believe, it is even less than in New York. The present secretaries are as follows: Massachusetts, Edward L. Pierce; New York, Charles S. Hoyt; Illinois, Frederic H. Wines; Ohio, ——; Pennsylvania, Wilmer Worthington. As Prof. Dwight, in his paper published in this number of the Journal, has treated quite fully of the New York Board, of which he is a member, we need not speak of it further. The Massachusetts Board is still under the presidency of Dr. S. G. Howe, who is now engaged in writing its sixth annual report, being the fifth which he has written. The Secretary's report will be published under the direction of Mr. Pierce, who assumed office in November, but is mainly written by his predecessor, Julius L. Clarke, and his chief clerk, Dr. H. C. Prentiss. The General Agent's report is the work of Mr. S. C. Wrightington, who has succeeded Mr. H. B. Wheelwright in that office. There will also be, this year, a report from the new Visiting Agent, Colonel Gardner Tufts, who was appointed last July, under an act of the Legislature of 1869, but who is not yet a member of the Board of Charities. A Labor Commissioner (General H. K. Oliver) was also appointed at the same time, but he is not a member of the Board, and will report separately. These various reports will be documents of much value, and will probably be published

in the month of March, in the series of Public Documents of Massachusetts. A second report of the New York Board should also be laid before the Legislature of that State before April, and a third report of the Ohio Board is now due.

The Illinois "Board of Public Charities" was appointed early in the summer, and organized immediately. It was fortunate enough to secure Mr. Wines as Secretary, who is an indefatigable worker, and it began at once to attend to its duties. During the past six months it has examined all the State institutions under its charge, visited all the county prisons and county almshouses, taken a census of the insane within the State, and decided, by a public conference, an important point respecting the hospital treatment of the insane, which is to be much improved in Illinois. Mr. Wines is now writing his report, which will be very valuable, and will be laid before the public in course of the winter or spring.

Although the Pennsylvania law creating a Board of State Charities was passed about the same time as a similar one in Illinois, Governor Geary made no great haste in appointing the members of the new Board. He finally did so in November, however, and they are men admirably qualified for the difficult work before them. They are: General Thomas L. Kane (a brother of Dr. Kane), of McKean County; George L. Harrison, of Philadelphia; T. B. Penniman, of Pittsburg; Wilmer Worthington, of West Chester, and G. Dawson Coleman, of Lebanon. The two last named are State senators, and Mr. Worthington had much to do with drawing up and passing the bill. He has been chosen Secretary of the Board, and, it is believed, will prove a good officer. Much of the efficiency of the Board depends upon its Secretary, who has more assigned him by law than similar officers in other States. It is not probable that he will make any report this winter, but will issue his first volume at the close of the year. It ought to be a full statement of the public charities of the great State of which it will treat, and not such a meagre exhibit as is yearly put forth by the Ohio Board. It is difficult to exaggerate the importance of the work which these boards have to do, and now that they exist in the four largest States of the Union, as well as in Massachusetts, the statistical result of their labors will be found highly useful. These five States have a population of more than 14,000,000, or nearly two-fifths of the whole people of

the country. The offices of the boards are, in all cases, at the State capitals. All of them, except that of New York, have more or less to do with the prisons of their respective States, but none of them can control the prison discipline. In Rhode Island, it is proposed, we believe, to place the prisons, as well as the almshouses and insane asylums, under one management, that State being so small as readily to admit of this. The same course is contemplated in Michigan. North Carolina has a Board of State Charities, but we know little of its history.

Deaf-Mute Instruction.—It is now about four years since a new discussion of the value of teaching deaf-mute pupils, in the American schools, by the method of articulation and lip-reading, began in Massachusetts, and rapidly extended to all parts of the Northern and Western States and to Canada. The subject was first brought before this Association at the New Haven meeting, in October, 1866, where it was briefly discussed. It was again considered in a department meeting at Boston, in the spring of 1867, and at the New York meeting, in November of the same year. In the meantime, Mr. E. M. Gallaudet, of the Columbia Institution, at Washington, one of our members, and a son of Dr. Gallaudet, the founder of the American Asylum at Hartford, had visited many of the European deaf-mute schools, in the summer of 1867, and had satisfied himself that articulation was more successfully practised there than here. Mr. John Clarke, of Northampton, Mass., had also, in the same summer, given $50,000 for the foundation of a school in his town, where articulation was to be taught by Miss H. B. Rogers, an accomplished and energetic lady of Massachusetts, who had already taught several pupils by this method. The progress made by her pupils, and the interesting statements of Mr. Gallaudet in his report, led to a full discussion of the new method at a conference of deaf-mute teachers, held in Washington, in May, 1868, and certain resolutions were there adopted, pointing towards its introduction in the older schools of the United States. This introduction has now been made, and classes in articulation and lip-reading are at present under instruction in the Hartford Asylum, the New York Institution, and the State Schools of Ohio, Michigan, Illinois, Indiana, Iowa, Wisconsin, and Minnesota. The same method is recommended for introduction in Missouri and California, and perhaps has

already been entered upon there, and in other States from which we have no recent information. The Pennsylvania Institution, at Philadelphia, is still debating its merits, while few of the more Southern schools have yet given it practical consideration.

Within the past year, the "Clarke Institution," at Northampton, Mass., where articulation is the only method in use, has increased the number of its pupils, and has received a large addition to its funds by the bequest of its founder, whose lamented death took place in July last. By his will he gave to it $200,000 in gold, which, added to the $50,000 previously given, makes a fund of a quarter of a million dollars, and provides the most ample endowment ever made by an individual in this country for a deaf-mute school. This fund will be managed by a corporation of twelve persons, the president being Mr. Gardiner G. Hubbard, and Governor Claflin, Professor Seelye, of Amherst College, Hon. Osmyn Baker, Mr. George Walker, and Mr. F. B. Sanborn being among its members. These gentlemen propose to build a suitable house for the school in Northampton during the present year. The present number of pupils is about forty, and there are more than half as many taught by the same method at a city school newly opened in Boston. There is also an articulating school in New York, founded by Mr. Engelsmann, a German, who learned to teach in one of the famous articulating schools of Germany. In these three schools there are some eighty pupils, while in the classes of articulation in the older institutions mentioned above there are perhaps two hundred more. Four years ago none were so taught in the whole country, except a half-dozen in private families. Four years hence, probably the number will exceed a thousand.

At first, the controversy between the friends of the two methods of instruction (by signs exclusively, and by articulation in part) was somewhat warm. Wider information has led, however, to a much more harmonious state of feeling, and it is worthy of mention that the great New York Institution—the largest in the world—has recently engaged as teacher of articulation, Mr. B. Engelsmann,* the German teacher above mentioned, and has thus adopted the distinctive German method for this class of its pupils, which differs considerably from the method of Miss Rog-

* See pages 77, 78, note.

ers. As an evidence of the present state of feeling among the principals of the older American schools, we may quote a passage from the October number of the *American Annals of the Deaf and Dumb*, which is published under the direction of E. M. Gallaudet, Collins Stone, Isaac L. Peet, W. J. Palmer, and Thomas McIntyre, all principals of long-established deaf-mute schools. This journal says:

"We ought not to be satisfied till we secure in some way the advantages of both systems of teaching deaf-mutes. It cannot be denied that in general the teaching of articulation to those who, it is admitted by all, can be benefited by it, has been neglected in this country, and we feel grateful to those who have so zealously and persistently brought this fact before the public. While we do not see the necessity for separate schools, and while we fear that in many cases time will be lost in experimenting and sanguine hopes disappointed, yet we believe the discussion will result in good, and that the American institutions will by practical experiment reach such adjustment of methods of instruction that the varied wants of the different classes of the deaf in our institutions shall be met.

"Two tendencies in this discussion are very gratifying. The necessity of bringing pupils into the institution at an earlier age, for the sake of more successful experiment in articulation, tends to lengthen the course of instruction, which is extremely desirable for the deaf and dumb under either system. Then the necessity of more individual instruction, and of dividing the pupils into classes with reference to articulation, tends to increase the number of teachers, which is a necessity that has always been felt and acknowledged. We cannot but anticipate that, as the result, directly and indirectly, of this discussion of methods of teaching and classes of the deaf, a more liberal spirit is to prevail in and towards our deaf and dumb institutions, and that henceforth the aim will be not merely to show which practises the most rigid economy and educates at the smallest sum *per capita*, but which produces the best results; the institutions ceasing to be regarded as savings-fund societies and charitable asylums, and becoming truly educational schools."

Our readers will regret to hear of the recent death of Mr. J. A. Jacobs, the Principal of the Kentucky State School for Deaf-Mutes, at Danville. He was an experienced teacher, and has published

useful works in aid of deaf-mute instruction. He is succeeded by his son, of the same name. The school over which he presided is one of the oldest in the country, and was early aided by a grant of the public lands, made by Congress, as was the Hartford Asylum also. Other schools are now raising the question whether they ought not to be aided in the same way, and it is not impossible that a general law may be passed, granting lands to all such schools which have not heretofore been aided in this way. The experiment of city schools for children of this class which is now beginning in Boston, will, if successful, lead to such schools in other large cities. Upon the whole, the cause of deaf-mute instruction has been greatly advanced within the four years that this Association has existed, and, in good part, through the exertions of its members.

State Boards of Health.—In all civilized countries, the protection of public health by an efficient sanitary administration is now considered one of the first duties of the government. In the United States, sanitary authorities exist as a rule only in cities and large towns. State governments exercise their undisputed right to protect public health almost without exception only in cases of extreme danger from epidemic diseases. Sanitary laws figure on the statute-books of most States; but, there being no central authority specially charged with their enforcement, they remain dead letters wherever there is no local police. It is true public health is less exposed to peril in the country than among large aggregations of population; yet no one will deny that the population outside of cities and towns in many parts of the country needs a better sanitary administration than it now enjoys. The question of securing to States at large, by the establishment of State sanitary authorities, the benefit of the same strict sanitary supervision which Boards of Health exercise in certain localities, has for years occupied some of our most eminent medical minds. But it was only in the course of last year that the first practical step in this direction was taken in the State which has led the way in more than one progressive reform. By an act passed last spring, the Massachusetts Legislature established the first State Board of Health instituted, as far as we are advised, in this country. The example of Massa-

chusetts in this respect is well worthy of emulation in other States. The character of the work of this newly constituted health authority will be seen from the following extracts from a circular issued by the State Board in October last, and sent to every local Health Board, physician, clergyman, and teacher in the State:

"In entering upon our duties, which are rather advisory than executive, we desire to establish such communication with the local Boards having this important subject in charge, that all may work together for the common advantage of the people, for the prevention of disease, and for the prolongation of life.

"We believe that all citizens have an inherent right to the enjoyment of pure and uncontaminated air, and water, and soil; that this right should be regarded as belonging to the whole community; and that no one should be allowed to trespass upon it by his carelessness or his avarice, or even by his ignorance. This right is in a great measure recognized by the State, as appears by the General Statutes.

"If these were strictly and impartially enforced, we should have a condition of public cleanliness and of public health which would make Massachusetts a model for all other communities. That this has not been done depends upon many causes, some of general, and others of purely local operation.

"It has been doubted whether the public mind is sufficiently aware of the dangerous elements around us; whether the connection between filth and disease is as yet proved to the public satisfaction; whether the people are convinced that undrained land is unwholesome to live upon.

"All these doubts of the public intelligence have impeded the operation of our laws.

"It is thought, also, that local and private interests have often been so strong as to paralyze the action of the Health authorities.

"But we hope and believe that a better time is coming; and we confidently look to you to put in force the powers which the laws have placed in your hands.

"Among these laws we would particularly call your attention to:

"General Statutes, Chapter 26, in which are comprised stringent provisions relative to the abatement of nuisances, to vaccination, to contagion, and to offensive trades.

"Also, to Chapter 49, Section 151, relative to the sale of milk produced from cows fed upon the refuse of breweries or distilleries, and to the sale of milk rendered unwholesome by any cause.

"Also to Chapter 166, in which the law is given relative to the sale of unwholesome provisions of all kinds, whether for meat or drink; the corruption of springs, wells, reservoirs, or aqueducts; the sale of dangerous drugs, and the adulteration of drugs of every sort.

"It will also be seen, on reference to Chapter 211 of the Acts of the year

1866, that it is in the power of any person aggrieved by the neglect of the Board of Health of any city or town to abate a nuisance, to appeal to the County Commissioners, who can in that case exercise all the powers of the Board of Health.

"Chapter 253 of the Acts of 1866 authorizes Boards of Health to seize and destroy the meat of any calf killed when less than four weeks old.

"Chapter 271 of the Acts of 1866 authorizes Boards of Health to appoint agents to act for them, under certain restrictions.

"The Legislature of 1868 passed two acts of great importance to the public health, to which we would respectfully and earnestly ask your attention. The first, Chapter 281, 1868, applies only to the city of Boston, and relates to tenement and lodging houses, placing them under very strict regulations, for the public good.

"The second, Chapter 160, is of general application. It provides that in any city or town, lands which are wet, rotten, or spongy, or covered with stagnant water, so as to be offensive or injurious to health, shall be deemed a nuisance, to be abated by the Board of Health of such city or town. In case they refuse to act, appeal may be made, by persons aggrieved, to the Superior Court or any Justice thereof, who may appoint three Commissioners with powers equal to those possessed by Boards of Health.

"We confidently look to you for the enforcement of these laws.

"We believe that public opinion will fully support you in so doing.

"We will give you all the help in our power.

"There is a great work before us, which, if carried out in the letter and spirit of the laws referred to, we cannot doubt will justify the wisdom which framed them."

The first annual report of the new State Board of Health was presented to the Legislature at the commencement of the year. It embodies the results of the enquiries of the Board into the subjects of: 1st. The sale of poisons; 2d. Slaughter-houses; 3d. Model lodging and common tenement houses, and their effects upon the health and morality of the people.

Regarding the first subject, the report says that, in seeking for a remedy for the evils growing out of the sale of drugs, it is doubtful whether a list could be prepared which would include all dangerous drugs, and it would be unwise to restrict either the physician or the dealer exclusively by wholesale in any way. As regards the retailer of drugs and medicines, the members of the Board believe that a remedy more or less complete for existing evils would be found in the requirement of a certain amount of instruction and special training before he should be permitted to exercise his calling. The precise way in which this should be accomplished they believe to be of less importance than the

principle, and they commend it to the attention of the Legislature.

On the subject of slaughter-houses, after treating to some extent upon the evils, the remedies suggested were as follows: 1. The prevention of putrefaction; 2. The conversion of the offensive vapors resulting from boiling, into inodorous and harmless gases. Everything connected with the business of slaughtering can in some of these two ways be disposed of, except the manure, which need be no more offensive than in a well-kept stable. To accomplish all this it is necessary to give up the practice of feeding the offal to hogs, and to build abattoirs and melting-houses within the same enclosures.

On the subject of lodging and tenement houses, the investigation of the Board has not been completed. The fact, however, is brought to the notice of philanthropists, that the model lodging-house, while giving to the poor, at a very cheap rent, a perfectly clean though humble home, with all the appliances of modern civilization, thus doing much towards promoting temperance and all the domestic virtues, really gives a good return to capital in a six per cent. interest as net profit for the money thus expended.

The Secretary of the Board has commenced the publication, in the press of Boston, of weekly reports of the mortality from the prevalent diseases, in the twenty largest cities and towns in this State.

Hospitals and Asylums for the Insane.—The past three or four years have witnessed a great extension of hospital accommodation for the insane poor in the States south and west of New England, and in one or two of the New England States. We believe there are now three large State asylums for the insane building or projected in New York, one in Pennsylvania, two in Illinois, and one in Connecticut. This last, at Middletown, has been open for some time, though not yet completed according to the original plan. Dr. Butler, also, has remodelled and greatly improved his Retreat at Hartford, where the pauper insane of Connecticut used to be treated before the Middletown Hospital was built. In Massachusetts, though no new hospital has been built, one is projected by the city authorities of Boston, who have been considering the location and character of the proposed

building for the last six years, at least. An asylum for the harmless insane was opened at Tewksbury, by the State, in 1866, and the authorities of the Worcester Hospital now propose to rebuild that establishment in a different form, two or three miles from its present site, which they will offer for sale, and, from the proceeds, build their new structure.

In connection with the new hospital in Illinois, and the proposed reconstruction of the Worcester Hospital, in Massachusetts, an interesting change of plan in the arrangement of building has been introduced. The Illinois Board of Charities invited a conference of hospital authorities, superintendents, and experts, at Springfield, Ill., on the 10th of November last, in order to consider a plan submitted by Dr. McFarland, Superintendent of the State Hospital, at Jacksonville, Ill., the general features of the project being as follows:

1. A central hospital, with all the appliances in use at present, constructed upon the present system. 2. A large farm, of not less than six hundred and forty acres of arable land. 3. Detached houses (not cottages) scattered over the farm, built to resemble ordinary dwellings, and without expensive heating apparatus or plumbing. 4. Each house for male patients to be under the supervision of a man and wife, assisted by one female servant and two farm laborers. 5. Frequent transfers from one house to another, as circumstances may indicate. 6. More thorough classification. 7. The organization of labor; the whole institution to be, as far as possible, upon an industrial basis; and the attendants employed with the distinct understanding that they are not mere nurses, but fellow-laborers with the patients. 8. Increased personal freedom, and more life in the open air. 9. Provision in the same institutions with the curables for all the incurables in the State. Drs. McFarland and Patterson, the only two medical superintendents of asylums in Illinois, coincide in recommending this plan.

Dr. Bemis, of the Worcester Hospital, has a project somewhat different, and probably better suited to the wants of M ssachusetts. He also proposes a central building, but mainly devoted to the use of the officers of the hospital. Closely connected with this he would have the kitchen, laundry, sewing-room, etc., the infirmary where most of the sick patients would be treated, and the wards for patients needing constant restraint. These he

would place in houses of moderate size, two stories high, able to receive about fifteen patients each, and joining, by means of corridors, with the central building. In these semi-detached houses he would place about a third part of his patients; while for the other two-thirds he would build separate houses, scattered over the farm, as in the Illinois plan, but each house for only fifteen patients, with the attendants. The chapel he would make a separate building in the midst of these houses; the whole establishment presenting the aspect of a small village, with gardens and fields. Dr. Bemis estimates that for half a million of dollars, 450 patients can be thus lodged in good quarters; and he believes that the present hospital property will sell within three years for nearly or quite that sum. It would be well for the city of Boston to adopt this form of a hospital, if one is built for the reception of the city poor.

Attention is more and more drawn to the sad condition, in most States, of the pauper insane.

At the Illinois Conference, Mr. F. H. Wines stated that the Board of Public Charities have found in the almshouses of that State from three to five hundred insane paupers, "many of whom are confined, for safety, in places unfit for wild beasts to inhabit." He estimated the whole number of insane persons in the State as not less than three thousand; and Dr. McFarland declared that the number was increasing. The latter also said that, in a hospital of 500 patients, 250 would remain quiet without lock or bolt, and half the remaining 250 would need but little restraint. He complained that the old hospital system adapts the whole institution to its smallest and worst class, while to the great majority its restraints are unnecessary, irksome, and productive of mischief. He thought one-half the male patients practise self-abuse, an evil growing out of the monotony in which they live. He believed a combination of the old system with the cottage system would be much better and less costly than the present practice, and estimated the cost of forty patients in a two-story family house at $5,000 a year, or $125 each—the present cost being nearly double this. The Conference passed resolutions favoring the view of Dr. McFarland by a unanimous vote, and recommended a combination of the old and the new system on the ground that it would increase both the economy and the efficiency of asylums for the insane. These resolutions were intro-

duced by the Lieutenant-Governor, who is himself a trustee of the Southern Asylum, about to be built at Anna.

In an address at laying the corner-stone of the new State Asylum, at Danville, Pa., Dr. Isaac Ray, of Philadelphia, formerly of Providence, said that there were in Pennsylvania, in his opinion, at least 5,833 insane persons, of whom about 3,900 need hospital treatment. But the hospitals and asylums of the State can only hold about 1,700, or less than half the whole number; and Dr. Ray gives a sad picture of the condition of those who do not go to any hospital. In most of the older States, the same condition of things exists, and is leading to measures for the better treatment of this unfortunate class. Dr. Howe, in Massachusetts, continues to urge that many of them shall be boarded in families, but few people as yet support his opinions.

Prison Reform.—The great extent and the numerous jurisdictions of the United States render it difficult to follow accurately and promptly the progress of prison reform—a subject which now engages attention in nearly every part of the country. It may be said, however, in a general way, that each year witnesses decided improvements in the prison code or the actual practice of many States, and that the tendency is more and more towards a reformatory system in the prisons of all grades, with an increasing knowledge and approval of the so-called Irish convict system. Hardly a year passes in which some State does not enact a "commutation law," as it is termed, by which sentences are shortened for good behavior. The last great State to do this was Pennsylvania, which last winter passed such a law; and under its provisions more than two hundred State prison convicts have already been discharged from the two State penitentiaries, at Philadelphia and at Pittsburg. So far as can be judged, the results of the law are good. Such, also, are believed to be the results of another statute, enacted at the same time, which allows the separate system to be replaced by the congregate system in the Western Penitentiary, at Pittsburg. The authorities of that prison had for some time been desirous to make the change, being satisfied that the separate system was not the best one, and they immediately put the new law in force. By the testimony of Mr. T. H. Nevin, President of the Board of Inspectors, and of other citizens of Pittsburg, the change has been very

beneficial to the discipline of the prison. There now remain only the Eastern Penitentiary, at Philadelphia, and some of the county jails of Pennsylvania, in which the separate system is in practice throughout the whole country. In New Jersey, a commutation law, similar to that of Pennsylvania, was also passed in 1869, and provision was made for the extension of the State Prison at Trenton, so as to give every prisoner a cell, and to build a new chapel, school-room, and workshops. An alteration in the Constitution, intended to remove the prison management from political control, failed in New Jersey, as it did also in New York, where it was part of the new constitution, and was defeated along with that. It is the belief of Dr. Wines that, had the prison article been separately voted on in New York, it would have been carried.

In Michigan, that enlightened prison officer, Mr. Z. R. Brockway, secured the passage of a law, last April, giving long sentences to women convicted of prostitution, and to female offenders under fifteen years of age. The latter are received at Mr. Brockway's "House of Shelter," near his prison, in Detroit, and are placed under reformatory influences more directly than the older offenders in the House of Correction. This step is an important one; and it is hoped to obtain similar legislation in Massachusetts this year in regard to women of the same class, and also intemperate women. In the last-named State, a strong effort is making for the establishment of separate prisons for women, and the subject will early be brought before the Legislature the present winter. Other reforms are proposed, and some of them may perhaps be carried.

The Virginia State Prison at Richmond, under the charge of Mr. Wardwell, is highly praised by Dr. Wines and other competent observers, as among the best managed prisons in the country. The former severity of treatment is very much relaxed, yet the discipline was never better, and the spirit of the convicts is heartily engaged on the side of reformation. It is to be hoped that no political changes in Virginia will cause the removal of so excellent an officer as Mr. Wardwell. Another new prison officer, of whom much is expected, is Mr. George W. Perkins, who has been for nearly a year in charge of the Illinois State Prison at Joliet, where he has nearly a thousand convicts under his control. Mr. Perkins has had great experience in the management of

young delinquents, having long been at the head of the Chicago Reform School. Mr. Henry Cordier, for five or six years the efficient State Prison Commissioner of Wisconsin, went out of office at the close of 1869. In California there is an increasing interest in the reformation of convicts; and the New York Prison Association continues its important labors.

Statistics of Libraries in the United States.—From the very valuable and interesting report of Mr. Justin Winsor, Superintendent of the Boston Public Library, to the Trustees, for the year 1868–9, we extract a few facts—such as our space will allow—that may at least direct attention to the report itself, which is full of information and suggestions touching the administration of such trusts, and is an important contribution to bibliothecal experience.

With the view to gather statistics concerning the condition and practical working of the libraries of the country, a circular was issued by Mr. Winsor, soliciting replies to a series of thirty questions. At the date of the report (Nov. 1, 1869) returns had been received from over one hundred and sixty libraries. The subjoined table, condensed from the extended tabulated statement accompanying the report, and including only libraries containing over five thousand volumes, exhibits a few of the statistics gathered. As Mr. Winsor remarks: "It must be remembered that these returns bear different dates during the present year (1869), that they have been in some instances amended by printed reports of a later date, and are rather an approximation to the contemporary status of the several libraries than indicating exactly their relative condition at a given period. The methods of management are so various, even in libraries of the same aims, and the care with which statistics are acquired or observations recorded is so different under different librarians, that the answers, when received, vary widely in the satisfaction they give."

The number of the libraries enumerated in the table is eighty-six. Not all the libraries containing more than five thousand volumes are given, but the omissions are few, and, with the exception of the Watkinson Library at Hartford, Conn., of minor importance. The statistics given show that there are in the United States but two libraries containing over 150,000

volumes, namely, the Boston Public Library and the Library of Congress. Of libraries containing between 100,000 and 150,000 volumes, there are four, namely, the Astor and Mercantile Libraries of New York, and the Harvard College and the Boston Athenæum Libraries. There are four libraries containing between 50,000 and 100,000 volumes, namely, the New York State Library, the Yale College Library, the Union Theological Library of New York, and the American Antiquarian Library of Worcester, Mass. Of libraries containing between 25,000 and 50,000, there are fifteen, namely, the Theological Seminary Library, of Andover, Mass.; the State Library, of Maine; the Peabody Institute Library, of Baltimore; Massachusetts State Library; the Mercantile Library, of Cincinnati; the Ohio, Pennsylvania, and Indiana State Libraries; the Society Library, of New York; the Mercantile Library, of Philadelphia; the Brown University and Athenæum Libraries, of Providence, R. I.; the Athenæum Library, of Rochester, New York; the Public Library, of Springfield, Mass.; and the Mercantile Library, of San Francisco, Cal.

The Boston Public Library enjoys the largest regular income, namely, $63,000; of which about $7,500 is derived from interest on a capital fund, and $55,000 from appropriation by the city authorities. The annual contribution from the city treasury has not been less than $50,000 for some years—an example of municipal liberality the like of which is not found anywhere else in this country. Next in point of pecuniary resources rank the Mercantile Library, of New York, with $38,000; the Mercantile Library, of Philadelphia, $27,324; the Boston Athenæum Library, with $22,000; the Cincinnati Public Library, with $21,000; the San Francisco Mercantile Library, with $20,000; and the Astor Library, with $15,000.

The returns of the Boston Public Library demonstrate the fact that free libraries with the least possible restrictions to the use of books by the general public, confer the greatest benefit upon the community. The small number of volumes lost last year reported by the same library, namely, twenty, indicates how little risk free libraries run, under an efficient management, in granting the largest privileges to book-borrowers, and how well founded is their presumption of general integrity on the part of the public.

In a short time, the United States will be able to boast of several new libraries of commanding proportions. Mr. James Lenox, of New York, has taken the initiatory steps for the foundation and endowment of a library in that city that will immediately take rank among the first in the country.

The liberal bequest of Dr. Rush will ensure greatly increased library facilities to the inhabitants of Philadelphia. Cincinnati, too, is to have a public library more in keeping with her growth than the existing one. With a new edifice capable of holding a quarter of a million of books, and the yearly appropriation of some $15,000, that city will soon have a public library of which she may be proud. At St. Louis, also, measures have been taken to build up a free public library on a large scale.

LIBRARIES IN THE UNITED STATES.

LIBRARIES.	When Founded or Opened.	Source of Income: Fund, Appropriation, Subscription.	Total Number of Volumes.	Average Yearly Increase in Vols.	Use of Books.		Persons Using Yearly.	Age of most of Users.	Number of Vols. Lost Yearly.
					Loans.	Used in Building.			
Albany, N. Y., State Library	1818	A. $11,000	76,000	2,200	1,500	115,000	18,000	21 up.	10
" Young Men's Association	1833	10,000	11,021	549	36,000	..	1,200	15–35	95
Amherst, Mass., College	1822	F. 1,300	24,286	650	5,000	1,000	300	15–30	5 or 6
Andover, Mass., Theological Seminary	1808	F. 1,200	29,000	..	5,000	..	125	..	..
Ann Arbor, Mich., University	1841	A. 1,750	16,000	600	1,270	26,000	1,500	16–25	6
Augusta, Me., State	1839	A. 800	30,000	750	5,000	..	..	20–50	Seldom
Baltimore, Md., Peabody Institute	1862	Foundation Fund	34,588	4,132	..	4,589	2,639	Adults.	..
" " Mercantile	1839	S. 5,728	22,072	900	..	..	1,420	..	..
Boston, Mass., Am. Congregational	1853	F. 4,000	8,000	1,000	Small	Nearly all	Few	25–80	..
" " Public Library	1852	F. 7,500 / A. 55,000	153,000	8,981	198,975	23,702	16,797	Majority / Minors	20
" " Athenæum	1807	F. 22,000	100,000	2,438	..	..	..	..	50
" " Boston Library	1794	F. 2,400 / S. 300	19,000	400	8–10,000	..	..	..	..
" " Mass. Historical Society	1791	7,000	18,500	400	..	..	..	21 up.	..
" " Mercantile	1820	..	19,555	700	28,000	..	1,024	18–30	..
" " Natural History Society	1831	F. In. of 5,000 / A. occasional	12,000	500	500	..	75	17–50	1
" " State	1826	A. 2,300 for Books	29,000	1,200	..	..	..	..	Very few
Brighton, Mass., Holton	1864	A. 500 / F. of 3,800	5,008	530	17,303	None	750	14–35	2 or 3
Brookline, Mass., Public	1857	A. 1,000	10,000	1,000	22,000	3,000	1,200	15–55	2 to 6
Brooklyn, N. Y., Mercantile	1857	F. 6,000 / S. 12,000	22,000	1,000	..	..	2,000	15–40	30

Brunswick, Me., Bowdoin Coll.	1802	A. 400	16,662	..	..	..	200	..	1
Buffalo, N. Y., Young Men's Association	1835	6,000	15,000	1,500	140,000	..	2,500	16–30	45
Cambridge, Mass., Harvard Coll., Gore Hall	1764	A. 250, binding F. 400	118,000	2,250	..	..	..	16–25	..
Chapel Hill, N. C., University	1789	None	6,700	..	..	..	25	15–25	..
Charlestown, Mass., Public	1860	A. 3,500	10,155	480	51,000	..	..	20–40	13
Cincinnati, O., Public	1867	15,000, Books 6,000, Exp.	21,588	5,392	38,947	3,783	..	Adults	6
" " Mercantile	1835	S. 10,000	30,206	2,315	33,000	3,000	3,800	..	..
Cleveland, O., Library Association	1846	5,000	10,000	600	25,600	1,000	800	10–25	4
Clinton, N. Y., Hamilton College	1812	None	20,000	50	2,006	..	200	14–25	..
Columbus, O., State	1817	A. 3,500	31,000	1,070	..	..	..	..	..
Concord, Mass., Public	1851	A. 296 F. 105	5,584	200	4,760	..	473	15–60	3
Detroit, Mich., Public	1865	10,000	15,500	3,000	30,000	1,500	2,200	18–40	16
" " Young Men's Society	1832	4,700	10,000	500	36,000	2,000	1,000	18–40	20
Fall River, Mass., Public	1861	A. 2,500	5,633	400	25,000	..	1,800	14–25	4
Fitchburg, Mass., Public	1859	A. 1,200	7,500	450	30,000	..	1,527	10–50	5
Harrisburg, Pa., State	1777	A. 1,800	39,000	700	..	..	..	..	..
Hartford, Ct., Young Men's Inst.	1838	7,500	19,238	1,046	60,000	..	..	..	..
Indianapolis, Ind., State	1831	A. 900	25,000	250	Few	2,500	..	12–30	..
Keokuk, Iowa, Library Association	1863	1,000	5,500	600	6,000	..	300	15–25	30
Lansing, Mich., State	1828	A. 250	25,000	3,500	..	..	..	20–50	6
Lawrence, Mass., Franklin	..	514	5,200	107	..	..	275	15–30	12
" " Pacific Mills	1854	S. 2,000	5,000	300	23,400	..	900	15–25	100
Lowell, Mass., City Library	..	A. 1,500 S. 500	13,821	600	43,777	..	1,100	..	8
Lynn, Mass., Public	1862	F. 3,000	10,672	1,100	49,164	..	1,100	14–20	60
Manchester, N. H., City Library	1854	2,500	13,100	600	38,000	..	..	..	..
Middletown, Ct., Wesleyan University	1831	2,327	17,000	..	3,000	..	160	16–25	..
Milwaukee, Wis., Young Men's Assoc.	1847	7,721	10,566	1,000	75,000	..	2,000	15–30	40
Montpelier, Vt., State	1830	A. 500	11,165	512	..	..	..	..	4
Newark, N. J., Library Association	1847	8,000	15,500	1,000	42,000	..	1,500	–25	Very few
New Bedford, Mass., Public	1852	F. 200 A. 2,500	21,000	1,000	35,000	35,000	2,000	16–40	25

LIBRARIES IN THE UNITED STATES—*continued.*

LIBRARIES.	When Founded or Opened.	Source of Income: Fund, Appropriation, Subscription.	Total Number of Volumes.	Average Yearly Increase in Vols.	Use of Books.		Persons Using Yearly.	Age of most of Users.	Number of Vols. Lost Yearly.
					Loans.	Used in Building.			
Newburyport, Mass., Free	1854	F. $1,300 A. 1,200	13,000	300	30,000	..	3–4,000	12–30	Few
New Haven, Ct., Yale College	1700	1,600	50,000	1,950	..	..	1,000	..	..
Newton, Mass., Theol. Seminary	1825	F. 630	11,000	300	..	..	50–60	20 up.	..
New York City, Apprentices'	1820	12,000	42,740	2,126	117,182	150	6,413	12–21	450
" Astor	1848	F. 15,000	138,000	2,300	..	74,655	28,154	16–50	300 in 20 yrs.
" Columbia College	1754	2,000	14,335	215	300	..	..	..	..
" Cooper Union	1859	2,500	5,000	Small	..	..	207,254 visits	16–60	2 per ct.
" Mercantile	1820	38,000	104,513	8,840	230,000	3,000	13,000	15–30	300
" Society Library	1839	1,000	28,000	800	1,500	2,000	250	25–50	..
" Union Theol. Seminary	..	9,400	57,000	1,100	..	..	..	..	..
Northampton, Mass., Public	1860	A. 1,100	5,000	200	10,000	..	600	..	12
Peabody, Mass., Peabody Institute	1854	F. 5,000	13,300	500	24,600	..	1,500	15–20	6
Philadelphia, Pa., Acad. of Nat. Sciences	1812	600	21,580	400	..	..	1–200	17–80	..
" " Athenæum	1814	..	14,500	..	..	..	..	Mid. Aged	Very few
" " Mechanics'	1820	2,500	20,000	..	24.897	..	1,616	10–18	44
" " Mercantile	1821	27,324	47,000	5,500	135,018	..	6,300	..	..
Pittsburg, Pa., Mercantile	1847	4,500	9,100	504	21,000	..	784	20–30	20
Providence, R. I., Brown University	1764	F. 1,500	38,000	500	6,000	Larger	1,000	20–60	1
" " Athenæum	1836	5,052	30,566	777	20,000	40,000	3,000	Und. 30	16
Rochester, New York, Athenæum	1830	3,600	19,000	700	2,500	..	600	20–50	20

Roxbury, Mass., Athenæum	1851	F. 380 S. 380	8,000	250	8,000	..	400	10–75	Few
Salem, Mass., Athenæum	1810	F. 300 S. 900	13,455	180	32,000	..	100 Families	12–75	6
St. Louis, Mo., Public	1865	4,000	11,800	..	57,417	..	3,700	7–70	46
San Francisco, Cal., Mercantile	1853	20,000	25,000	2,000	70,000	..	2,500	..	125
Savannah, Ga., Historical Society	1839	2,200	7,500	200	1,000	..	50	25–50	..
Schenectady, N. Y., Union College	1795	300	10,000	200	1,200	400	125	16–21	5
Springfield, Mass., Public	1857	A. 1,500 S. 2,500	26,488	2,000	80,000	Small	1,600	..	..
Syracuse, New York, Public	1858	..	7,370	852	31,000	9,000	3,000	10–20	13
Taunton, Mass., Public	1866	F. 100 A. 2,500	7,995	700	39,000	300	2,800	..	2
Troy, N. Y., Young Men's Association	1834	5–8,000	18,178	300	30,000	..	800	10–20	11
Waltham, Mass., Public	1865	A. 2,000	5,000	412	32,991	100	2,756	12–35	7
Washington, D.C., Library of Congress	1815 and 1851	11,500	175,000	8-9,000	..	90 per ct. of use.	350	25–45	20
West Point, Military Academy	1812	1,500	21,554	375	10,820	6,000	400	17–21	..
Williamstown, Mass., College	1792	700	12,000	375	..	..	300	17–25	8
Wilmington, Del., Young Men's Assoc.	1788	8,213	7,589	350	27,903	..	1,200	12–70	28
Worcester, Mass., Public	1860	A. 5,000 F. 2,600	21,000	1,500	60,000	..	4,000	15–20	16
" Am. Antiquarian Society	1812	F. 3,500	50,000	912	..	..	..	..	..

Railroad Libraries.—Railway corporations in this country, as a rule, are not remarkable for humane regard for the intellectual, moral, and material interests of their employees. But that they are not all guided merely by selfishness in their relations to the latter, is proved by the establishment within the last few years of several free libraries by the managers of railway companies for the special benefit of their servants. Among these, the "Circulating and Consulting Library for the Officers and Employees of the Boston and Albany Railroad Company" affords an example well worthy of imitation by the great corporations of the East and West. Founded in 1868, it now numbers over twelve hundred volumes, all of which are gifts of friends of the enterprise connected with the Company. The following extracts from its rules and regulations will give an idea of its objects and management:

Objects.—To have within reach of officers and employees the best books on the railway system and the industrial arts, and, also, as many on the sciences and in general literature as shall be attainable.

Organization.—A Library Committee of five shall have control of the library, and appoint its Librarian. Said Committee shall consist of two members of the Board of Directors, the Clerk of the Boston and Albany Railroad Company, the Assistant Superintendent, and the Master-Mechanic of the Boston and Worcester Division, who shall hold their office for one year, and until others are appointed in their stead. All vacancies in the Committee to be filled and appointments made by the Board of Directors, in such manner as they shall direct.

Composition of the Library.—The library is divided into Consulting and Circulating departments:

Consulting.—The works in the Consulting Department will not be removed from the library without the consent of at least two members of the Library Committee; but may be seen whenever the library is open, and at such other times as the Librarian may appoint or permit.

Circulating.—All in the Circulating Department are for the use of every officer and employee of the Boston and Albany Railroad, while in its service, and while they comply with the rules established by the Committee.

Rules for the Circulating Department:

I. Not more than two volumes shall be taken at a time by any one person, nor kept more than two weeks, nor taken a second time when wanted by another.

II. Any one known to the Librarian to be in the service of the Boston and Albany Railroad Company may call when the library is open or send for books, in accordance with its rules.

III. Those who cannot call will order through a Station Agent, or Head

of Department, and the person ordering will be held answerable to the Librarian for the safe return of the books.

IV. A fine of five per cent. per day upon cost will be charged by the Librarian upon each book for detention beyond the prescribed time, and he will assess such fines for injuries or mutilations as may seem to him just, which must be paid before other books are delivered to the same person.

V. The fact of taking books from the library will be understood as an acknowledgment of the binding force of the rules of the Committee in regard thereto.

VI. All persons out of Boston will pack their books in strong paper, and direct to "Librarian, Boston and Albany Railroad Library, Boston," writing plainly from whom, and name of station, and, as far as practicable, will send them on Tuesday of each week. Orders for books shall be answered on Thursday or Friday of each week.

VII. Books in transit, either way, shall not be at the risk of the person sending or receiving them, when forwarded in care of a regular Baggage-Master.

VIII. If any one has books or other property of the library when leaving the service of the Company, the value of the same shall be deducted from his wages.

Two other libraries similar to the one described exist in this country, namely: The Cleveland and Pittsburg Railroad Reading-Room Association, at Wellsville, Ohio, and the Vermont Central Railroad Library.

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2. Foreign.

Annual Meeting of the British Association for the Promotion of Social Science.—The Thirteenth Annual Meeting of the British Association for the Promotion of Social Science, convened at Bristol, on September 29 last, and continued in session until October 5, inclusive. It was very largely attended by members and the resident public. According to custom, the members, on the opening day, attended divine service in the Cathedral of the city, when the Lord Bishop of the Diocese preached a sermon to them. The proceedings proper were commenced in the evening of the same day, by an elaborate address from Sir Stafford Northcote, President of the Association, in which he dwelt upon the various social reforms calling for the attention of the Association.

The mode of procedure followed during the session was the same as at the previous annual meetings. The proceedings were carried on in four separate bodies, representing the four departments, namely, Jurisprudence, Education, Health, Economy and Trade. The programme assigned fixed questions to each department for consideration and action. Parties specially invited to treat of these questions were to read papers, which were to be open to discussion by the members of the respective departments. In addition to the regular papers, the reading of so-called "voluntary papers," that is, those the preparation of which had not been requested, on both the questions announced in the programme and other subjects was permitted.

General meetings uniting all the departments were held on three evenings of the session.

The proceedings of the department meetings were opened by addresses by the presiding officer of each, the time of the delivery of which was so arranged that all the members of the Association could hear them.

The opening address in the Department of Jurisprudence and the Amendment of the Law was delivered by the President, Mr. G. W. Hastings. The questions proposed to this department were:

1. What ought to be the legal and constitutional relations between England and the Colonies?
2. What is the most expedient mode of introducing into England a system of public prosecution?
3. What ought to be the principles regulating the ownership and occupation of land?
4. Can infanticide be diminished by legislative enactments?
5. What have been the results of the Reformatory Schools and Industrial Schools Act?

Besides these questions, the subjects of international law, the abolition of capital punishment, prison labor, legislation for trades-unions, patent laws, the right to property of married women, professional crime, and the administration of civil and criminal justice, were considered.

Among those who took an active part in the proceedings of the Jurisprudence Department were, besides the presiding officer, Messrs. Thomas Hare, J. E. Gorst, John Noble, F. P. Labilliere,

L. Fry, Sir John Bowring, Sergeant Cox, T. S. Smith, A. Hill, and T. W. Saunders.

In the Department of Education the opening address was delivered by Canon Kingsley. The questions assigned to it were:

1. Is an unsectarian scheme of education inconsistent with religious teaching?
2. How may the state best promote the education of the destitute and neglected portion of the population?
3. In what way can the Endowed Schools Bill be worked so as to bring the educational endowments within the reach of all?

The subjects of female education, the separation of the sexes in education, the influence of education on crime, and the proper system of taxation for educational purposes, were also considered in this department. Besides Canon Kingsley, Canon Norris, Reverends F. Clay. H. De Bunsen, Dr. Rigg, E. E. Bartlett, J. Flint, Thomas Wildes, and Miss Mary Carpenter took a prominent part in the proceedings.

In the Department of Health, Dr. J. A. Symonds opened the proceedings with an address. The questions proposed were:

1. Can the government further beneficially interfere in the prevention of infectious diseases?
2. What legislative measures might be proposed to deal with cases of uncontrollable drunkenness?
3. Should the Contagious Diseases Act be extended to the civil population?

Besides Dr. Symonds, Drs. Budd, Hardwicke, Lankester, and Gairdner, and Mr. G. Godwin led the proceedings in this department.

In the Department of Economy and Trade, Mr. S. Cave, M.P., made the opening address. The questions before this department were:

1. Is it desirable that state aid should be given to emigration, and if so in what form?
2. In what respects may the administration of the Poor-law be improved?
3. How may the condition of agricultural laborers be improved?

Among the other subjects considered in this department were: trades-unions, co-operation, the relations of capital and labor, pauperism and crime, the reduction of railway fares, the responsibility of railways as respects human life, and the compulsory examination of masters and mates in the Merchants' Marine Service.

Besides Mr. Cave, Messrs. S. Moreley, E. S. Robinson, Dr. R. W. Tibbets, R. M. Torrens, Col. Grant, R.E., J. Jones, Col. Oldfield, Canon Girdlestone, Sir Stafford Northcote, and Reverends T. H. Clarke and D. Lambert participated actively in the proceedings.

The evenings assigned for general meetings were mainly devoted to public addresses by leading members of the Association.

A novel feature of the British Social Science Congress was the "Ladies' Conference," or meeting of the female members of the Association, who held separate sessions on five days. Owing to the adoption of the singular rule of excluding males in general, and reporters in special, but little transpired of the proceedings of this meeting.

Mr. William Beach Lawrence, late Minister to the Court of St. James, was the only American who took part in the proceedings of the Congress proper.

Dr. Elizabeth Blackwell, of New York, addressed the Ladies' Conference on the subject of the education of women for the medical profession.

Reforms in Popular Education in Europe.—The history of mankind is replete with exemplifications of the one truth that the growth of political liberty keeps pace with the spread of intelligence, as well as of the other that political progress is almost invariably followed by a corresponding improvement in the intellectual condition of the masses. The records of our times are especially rich in practical illustrations of the favorable reaction of political reforms upon popular education, the main source of popular intelligence. In the leading countries of the Old World, every onward political move has of late years been supplemented, so to speak, by efforts to promote popular instruction as the best means of consolidating free institutions. Thus, in France, upon the first relaxation of the autocratic rule, reforms in higher education

were at once set on foot, and measures taken to increase the educational facilities of women. Upon the recent formal abandonment of the absolute for a constitutional *régime*, the new liberal ministry made haste to promise great improvements in elementary instruction. In Prussia, an active agitation for reform in the common-school system has been carried on ever since the inauguration of universal suffrage in the eventful year 1866. In Austria, the adoption of a constitutional form of government, in consequence of the events of the same year, led to an entire reconstruction, on a liberal basis, of the whole system of elementary education. In Italy, popular education has also been the subject of reformatory action since 1859.

In Great Britain, upon the passage of the Reform Bill and the admission of millions of new voters to participation in the government under it, the defects of the existing educational system, which could not be relied on to produce an intelligent voting population, became the subject of wide-spread discussion. The public agitation of educational reform resulted last year in a movement for a national organization, which should advocate a more liberal system of popular education before the country and in Parliament. A call for a public meeting was circulated throughout the Kingdom, and signed by no less than thirty-five hundred persons of every class and calling, including forty members of the House of Commons and several hundred clergymen. The meeting was held on October 12 and 13, at Birmingham. The attendance was large, and comprised a very full representation of liberal British sentiment of every shade. Among those who took a leading part in it were Professors H. Fawcett and Thorold Rogers, E. Potter, M.P., George Dixon, M.P., Rev. Dr. Rowland Williams, Archdeacon Sandford, A. J. Mundella, M.P., Edmund Beales, Lord Campbell, Alfred Field, Rev. F. Barham Zincke, Captain Maxse, Hon. George Broderick, and other well-known public men, including the officers of the most powerful Trades-Unions.

A most earnest spirit pervaded the proceedings. A "National Educational League" was organized, of which all the signers of the call became members, and whose objects were proclaimed to be:

1. The establishment of a system which should secure the

education of every child in England and Wales, and under which, *a*, local authorities should be compelled to provide school accommodations for every child in their respective districts; *b*, the attendance at school of all children should be compulsory; *c*, the cost of maintaining public schools should be raised partly by local and partly by national taxation, and their management should be entrusted to local authorities under government supervision.

2. To make all schools aided by local rates unsectarian.

The leaders in the movement, although assured of the hearty sympathy and active aid of the most intelligent portion of the English public, appear to be fully prepared for a long and serious struggle before the educational reforms proposed by the League can be carried. Their plan of operation includes a thorough agitation by public lectures and the printing-press, which the large amount of money—some £15,000—subscribed before and at the Birmingham meeting will enable them to carry on, and the introduction of a reformatory measure in Parliament, embodying the programme of the League.

According to present appearances, the agitation for educational reform promises to bear fruit much earlier than reform movements usually do in Great Britain. As announced in the Queen's speech at the recent opening of Parliament, the Gladstone Ministry will introduce an educational reform bill during the present session of that body. But as the announced Government measure will probably not go so far as the programme of the National Educational League, the work of the latter is not likely to be brought to a speedy close.

British Mining Legislation.—The history of mining legislation in England reveals the same slow progress in reform that characterizes political and social life in that country in general. Up to 1779, the British miners were mere serfs. The law then in force authorized the owners of the mines to work their hands as many hours a day as they chose. The miners were sold like chattels with the mines, and punished with the utmost severity if they left the mine to which they belonged for work elsewhere. This barbarous law was somewhat modified in

1779, but fully abolished only by the passage of the acts of 1797 and 1799.

From the early part of this century up to the present time, the progress of mining legislation in England has been mainly due to the persistence of the powerful miners' Trades-Unions, which existed even before the passage of the law permitting a combination of workingmen in 1824, and which have steadily grown in numbers and influence since. They first directed their efforts to the abolition of the system of "truck-shops" (stores kept by the owners of mines, where the miners were forced to buy at exorbitant rates), and they obtained a parliamentary enquiry into it, which resulted in its prohibition, by an act passed in 1831. The miners' Unions next exerted themselves to obtain legislation to protect workmen from the bad ventilation of mines, and to prohibit the employment of women and children. The subject was referred, in 1834, to a parliamentary committee. The committee recommended some amendments to the mining laws, which were not, however, then acted upon. It was only through the steady pressure of the Unions that an act was at last passed, in 1842, absolutely forbidding the employment underground of women, and of children of both sexes less than twelve years old. This act still left the safety of miners insufficiently provided for. Although unceasingly laboring for better legislative protection in this respect, the Unions succeeded only, in 1850, in obtaining a new parliamentary enquiry, which resulted in the passage of an act creating official inspectors, charged with the control of the sanitary condition of mines. But, owing to the insufficient number and limited authority of the inspectors, no great change for the better was effected. Hence the Unions renewed their efforts for a more efficient law. Parliamentary commissions again enquired into the subject in 1852 and 1853, whose labors led to the enactment of an improved mining law in 1855. But even with this the Unions had reason to be dissatisfied, and they started a new agitation for further reform. They succeeded, however, only within the last few years in getting the subject of the inspection of mines again before Parliament. A committee of enquiry was again appointed by the latter, whose labors furnished the basis for the "Bill to Consolidate and Amend the Acts relating to the Regulation and Inspection of Mines," introduced by the Home Secretary in the House of Commons in April

last. As the subject of mining legislation has lately attracted great attention in this country, we print in the following the main provisions of the British law project, partly in condensed form and partly *in extenso.*

The bill is divided into five chapters, and forty-six clauses or sections. The first chapter relates to the employment of women and children. It provides in

SEC. 5. No child under the age of twelve years, and no woman above that age, shall be employed in underground labor.

SEC. 6. No male person under sixteen and above twelve years of age shall be employed below ground during a period exceeding twelve hours in any twenty-four hours.

SEC. 8. A register of all persons referred to in Sec. 6, specifying name, age, residence, and date of first employment, shall be kept by owners of mines.

SEC. 9. Only male persons shall be allowed to have charge of any engine, windlass, or gin used to carry persons to and from mines, or of any part of the machinery, ropes, chains, or tackle connected therewith. If the machinery for transporting persons is worked by steam or mechanical power, the person in charge shall be at least eighteen years of age; if worked by animal or manual labor, at least fifteen years.

The second chapter relates to wages, and provides in

SEC. 11. No wages shall be paid to any person at or within any public-house, beer or liquor shop. All wages shall be paid in money by the immediate employer at an office specially provided for the purpose. No deduction shall be made from any wages for any expense incurred in improving the safety of mines.

SEC. 12. When wages are paid according to weight, measure, or gauge, the persons receiving wages may at their own cost station one of their number at the place appointed for weighing, measuring, or gauging, to take an account thereof in behalf of such persons by whom he is so stationed. But the person so stationed shall not be authorized to interfere with the weighing, measuring, or gauging; and the absence of such person shall not be a reason for interrupting or delaying such weighing, measuring, or gauging. The public inspectors of weights and measures may, from time to time, inspect the weighing machines, weights, measures, and gauges used in mines.

The third chapter relates to the safety of coal and ironstone mines. It provides in

SEC. 13. After the commencement of this act, the owner or agent of a coal and ironstone mine shall not employ any person in such mine, or permit any person to be in such mine for the purpose of employment therein, unless there are in communication with every seam of such mine for the time being at work at least two shafts or outlets, separated by natural strata of not less than ten feet in breadth, by which shafts or outlets distinct means of ingress and egress are available to the persons employed in such seam, whether such two shafts or outlets belong to the same mine, or one or more of them belong to another mine.

Provided that such separation shall not be deemed incomplete by reason only that openings through the strata between the two shafts or outlets have been made for temporary purposes of ventilation, drainage, or otherwise.

This section shall not apply to opening a new mine for the purpose of searching for or proving minerals, or to any working for the purpose of making a communication between two or more shafts, so long as not more than twenty persons are employed below ground at any one time in the whole of the different seams in connection with each shaft in such new mine or such working.

SEC. 14. Every award made in pursuance of any act repealed by this act, in consequence of which award an owner was exempted from the foregoing provision with respect to shafts

or outlets, or was allowed time for providing the same, shall have the same effect as if it had been made in pursuance of like provisions in this act.

SEC. 15. Unless a mine be divided into separate districts or panels, in such manner that each separate district or panel has at least one independent intake (or passage for the supply of air to it from the downcast shaft or main air-way), and at least one independent return air-way (or passage for the current of air from the district or panel) to the main return or air-way or upcast shaft (at which is the exit for the return air), not more than one hundred persons shall be employed at the same time in such mine, or be in such mine for the purpose of employment therein.

Provided that—

(1.) The air for supplying two or more districts or panels may be taken together in one intake (or passage) for such distance from the shaft as may, upon application being made, be allowed by the Secretary of State.

(2.) The currents of air returning from two or more districts or panels may be allowed to join at such place as the Secretary of State may, upon application being made, consider desirable for the purpose of allowing such currents to mix before coming within reach of the flame of a ventilating furnace or otherwise.

Where a mine is divided into such separate districts or panels, not more than one hundred persons shall be employed, or be for the purpose of employment in any separate district or panel.

SEC. 16. If any owner or agent acts in contravention of, or fails to comply with, any of the foregoing provisions with respect to shafts, outlets, districts, and panels, he shall be guilty of an offence against this act. Any of Her Majesty's superior courts of law or equity, whether any other proceedings have or have not been taken, may, upon the application of the Attorney-General, acting in behalf of the Secretary of State, prohibit by injunction the working of any mine in which any person is employed, or is permitted to be for the purpose of employment, in contravention of the foregoing provisions with respect to shafts, outlets, districts, and panels, and may award such costs in the matter of the injunction as the court thinks just; but this section shall be without prejudice to any other remedy permitted by law for enforcing the provisions of this act.

SEC. 17. No person shall be precluded by any agreement from doing such acts as may be necessary for providing a second shaft or outlet to a mine, or dividing the mine into districts or panels, where the same is required by this act, or be liable under any agreement to any penalty or forfeiture for doing such acts as may be necessary in order to comply with the provisions of this act with respect to shafts, outlets, districts, or panels.

SEC. 18. The following regulations shall be observed in every coal and ironstone mine by the owner and agent thereof.

(1.) An amount of ventilation shall be constantly produced in every coal and ironstone mine adequate to dilute and render harmless noxious gases to such an extent that the working-places of the pits, levels, and workings of every such mine, and the travelling roads to and from such working-places, shall be in a fit state for working and passing therein.

Provided that the court may dismiss any charge for acting in contravention of this rule, if satisfied that all reasonable precautions have been taken by the owner, agent, or person who is so charged.

(2.) All entrances to any place not in actual course of working and extension, and suspected to contain dangerous gas of any kind, shall be properly fenced across the whole width, so as to prevent access thereto.

(3.) In every working approaching any place where there is likely to be an accumulation of gas, no lamp or light shall be used other than a safety-lamp.

(4.) Whenever safety-lamps are required by these regulations or by the special rules (in this act mentioned) to be used, they shall not be used until they have been first examined and securely locked by a competent person or persons duly authorized for this purpose.

(5.) In any mine or part of a mine in which safety-lamps are required by the special rules to be used, no person shall use powder or other explosive or inflammable substance for the purpose of blasting or of getting coal or ironstone, except to the extent and in the manner authorized by the special rules.

(6.) Where a place is likely to contain a dangerous accumulation of water, the working approaching such place shall not exceed six feet in width, and there shall be constantly

kept at sufficient distance, not being less than five yards in advance, at least one bore-hole near the centre of the working, and sufficient flank bore-holes on each side.

(7.) Every underground plane on which persons travel, which is self-acting or worked by an engine, windlass, or gin, shall be provided (if exceeding fifty yards in length), with some proper means of signalling between the stopping places and the ends of the plane, and shall be provided in every case, at one side or the other of such plane, at intervals of not more than twenty yards, either with sufficient man-holes (or places of refuge), or with a space (for a place of refuge) of sufficient length and of at least three feet in width between the wagons running on the tram-road in the plane and one side or the other of the plane, which man-holes or space shall be constantly kept clear.

(8.) Every level or incline plane where the load is drawn by a horse or other animal shall be provided, at one side or other of the plane, at intervals of not more than fifty yards, either with sufficient man-holes or with a space of sufficient length and of at least three feet in width between the wagons running on the tram-road in the plane and one side or the other of such plane, which man-holes or space shall be constantly kept clear.

(9.) Every shaft or pit which is out of use, or used only as an air-pit, shall be securely fenced.

(10.) Every working and pumping pit or shaft shall be properly fenced, but this shall not be taken to forbid the temporary removal of the fence for the purpose of repairs or other perations, if proper precautions are used.

(11.) Every working and pumping pit or shaft, where the natural strata are not safe, shall be securely cased or lined or otherwise made secure.

(12.) Every working pit or shaft shall be provided with some proper means of communicating distinct and definite signals from the bottom of the shaft to the surface, and from the surface to the bottom of the shaft.

(13.) A sufficient cover overhead shall be used when lowering or raising persons in every working pit or shaft, except where it is worked by a windlass or gin, or where the person is employed about the pump or work of repair in the shaft, or where a written exemption is given by the inspector of the district.

(14.) A single linked chain shall not be used for lowering or raising persons in any working pit or shaft, except for the short coupling chain attached to the cage or load.

(15.) There shall be attached to the drum of every machine used for lowering or raising persons, flanges or horns, projecting sufficiently to prevent the rope from slipping off the drum.

(16.) There shall be attached to every machine worked by steam, water, or mechanical power, and used for lowering or raising persons, an adequate break, and also a proper indicator (in addition to any mark on the rope), which shows to the person who works the machine the position of the cage or load in the pit or shaft.

(17.) Every part of the machinery used in or about the mine near to which persons are liable to be employed, or to pass in the course of their employment in or about the mine, and which may be dangerous to such persons, shall be securely fenced so far as practicable.

(18.) Every steam-boiler shall be provided with a proper steam-gauge and water-gauge, to show respectively the exact pressure of steam, and the exact height of water in the boiler, and with a proper safety-valve.

(19.) A barometer and thermometer shall be placed above ground, in a conspicuous position, near the entrance to the mine.

If the owner or agent of a coal and ironstone mine acts in contravention of any of the foregoing regulations, he shall be guilty of an offence against this act.

SEC. 19. If any person does any of the following things, namely:

(1.) Being in any place where a safety-lamp is required by this act, or by the special rules to be used, unlocks or wilfully damages any safety-lamp, or uses any safety-lamp which he knows to be defective.

(2.) Wilfully damages, or, without proper authority, removes any fence, fencing, or casing, provided in compliance with this act.

(3.) Wilfully damages, or, without proper authority, removes or renders useless any means of signalling, signal cover, chain, flange, horn, break, indicator, steam-gauge, water-gauge, safety-valve, barometer, or thermometer, or other thing in any coal and ironstone mine, provided in pursuance of this act.

(4.) Places anything in any place of refuge so as to prevent proper access thereto.

(5.) Fails to observe such directions with respect to working as may be given to him with a view to comply with the regulations respecting working contained in this act or in the special rules—he shall be guilty of an offence against this act.

The third chapter also provides for the establishment of such rules for the conduct and guidance of the persons acting in the management of mines, or employed in or about them, as may appear best calculated to provide for the safety of the persons so employed. Such rules, when established, shall be observed as if they were enacted in this act. Copies of such rules shall be forwarded to the Secretary of State, who may propose modifications to the owners. If the latter do not accept the modifications of the Secretary of State, the matter shall be settled by arbitration. The owners and the Secretary of State shall have power to propose amendments to such rules, which, in the case of the former, shall be valid only with the approbation of the latter. Due publicity must be given to such rules. Arbitrators shall be appointed by the owners of mines and the Secretary of State, through the inspectors as his agents. Each party shall appoint one arbitrator. The two arbitrators shall elect an umpire. Neither the arbitrators nor the umpire shall be interested in the mine which is the subject of arbitration.

The third chapter further provides for the procedure in cases of opening and abandonment of mines. Notice must be given within two months of the commencement, recommencement, abandonment, or recontinuance of any mine to the inspector of the district. Where any mine is abandoned, or the working thereof discontinued, the owner shall cause the same to be securely fenced.

Where, in any mine or any works, above or below ground, connected with any mine, loss of life or any serious personal injury occurs from any cause whatever, the owner or agent shall notify the inspector of the district of the fact, specifying the probable cause of the accident, and the number of persons killed and injured.

The fourth chapter relates to inspection. It provides in

Sec. 31. The Secretary of State may, from time to time, appoint any fit persons to be inspectors of mines, and assign them their duties, and may award them such salaries as the Commissioners of Her Majesty's Treasury may approve, and may remove such inspectors.

Sec. 32. Any person who practises or acts as a land agent, or as a manager, viewer, or agent, or mining engineer, or valuer of mines, or arbitrator in any differences arising between owners of mines, or is otherwise employed in or about any mine, shall not act as an inspector of mines under this act.

Sec. 33. An inspector under this act shall have power to do all or any of the following things, namely:

(1.) To enter, inspect, and examine any mine, and the works and machinery belonging thereto, at all reasonable times by day and night, but so as not to impede or obstruct the working of the said mine.

(2.) To examine into and make enquiry respecting the state and condition of any mine, and the works and machinery connected therewith, and (in the case of a coal and ironstone mine) the ventilation of the mine, and the mode of lighting or using lights in the same, and all matters and things connected with or relating to the safety of the persons employed in or about the coal and ironstone mine.

(3.) To make such examination and enquiry as may be necessary to ascertain whether the provisions of this act, relating to matters above ground or below ground, are complied with in the case of any mine.

(4.) To exercise such other powers as are conferred by any part of this act, or as may be necessary for carrying this act into effect.

Every person who wilfully obstructs any inspector in the execution of this act, and every owner and agent who refuses or neglects to furnish to the inspector the means necessary for making any entry, inspection, examination, or enquiry under this act, shall be guilty of an offence against this act.

Sec. 34. If in any respect (which is not provided against by any express provision of this act, or by any special rule) any inspector find any coal and ironstone mine, or any part thereof, or any matter, thing, or practice in or connected with any such mine, to be

dangerous or defective, so as in his opinion to threaten or tend to the bodily injury of any person, such inspector may give notice, in writing, thereof, to the owner or agent of the mine, and shall state in such notice the particulars in which he considers such mine, or any part thereof, or any matter, thing, or practice, to be dangerous or defective, and require the same to be remedied. The inspector shall also report the same to the Secretary of State. If the owner or agent objects to remedy the matter complained of, he may, within twenty days after receiving notice, send his objection in writing to the Secretary of State, whereupon the matter shall be determined by arbitration.

SEC. 35. The owner or agent of every mine shall keep an accurate map or plan of the workings of such mine, showing the workings up to, at least, six months previously.

SEC. 36. Where any mine is abandoned, or the working thereof discontinued, the owner of such mine shall, within three months thereafter, send to the Secretary of State an accurate map or plan showing the workings and boundaries of such mine, up to the time of its abandonment or discontinuance.

SEC. 37. Every inspector shall make an annual report to the Secretary of State or communication to Parliament.

The fifth chapter relates mainly to coroner's inquests on deaths occurring in mines, and to the penalties under the provisions of the act. It provides in

SEC. 38. All inquests shall be held in the presence of an inspector, or some other representative of the Secretary of State, who shall watch the proceedings, and shall be at liberty to examine any witness. Where evidence is given at an inquest, at which an inspector is not present, of any neglect causing or contributing accidents, or of any defect about the mine requiring a remedy, the coroner shall notify the inspector of the district of this evidence. No person having a personal interest in, or employed in, or in the management of any mine in which an accident has occurred, shall be qualified to sit on a coroner's jury.

SEC. 39. Every owner and every agent who is guilty of an offence against the act shall be liable to a penalty not exceeding twenty pounds for each offence, and, if the inspector has given a written notice of the offence, to a further penalty not exceeding one pound for every day after such notice that such offence continues to be committed.

Every person, other than aforesaid, employed in or about a mine, who is guilty of an offence against this act, or is guilty of any act or omission which, in the case of an owner or agent, would be an offence against this act, shall be liable, in the discretion of the court, to a penalty not exceeding two pounds, or to imprisonment, with or without hard labor, for a period not exceeding three months.

Every person who is guilty of any contravention of or non-compliance with any provision of this act, which contravention or non-compliance is not expressly declared to be an offence, shall be liable to a penalty not exceeding twenty pounds for each offence.

SEC. 40. Offences of these acts shall be tried before justices of the peace.

SEC. 41. A person who is the owner or agent of any mine, or the father, son, or brother of such owner or agent, shall not act in any judicial capacity in the trial of offences against the act.

SEC. 42. The Secretary of State may, if he think fit, direct the fines imposed under the act to be distributed to the person or persons injured by accidents, or their relatives, provided that such person or persons did not contribute to occasion the accident.

CONGRESS OF BRITISH TRADES-UNIONS.—The second annual congress of "Trade Councils" and "Trade Societies" was held in the last week of August last at Birmingham, England. Its sessions extended over six days. Representatives of the Unions of basket-makers, coopers and case-makers, carpenters and joiners, bricklayers, workers in iron and steel, coal and iron-

miners, glass-makers and glass-cutters, house-painters, lace-makers, bakers, potters, and other trades were present from all parts of the United Kingdom. Among the delegates were nearly all the well-known workingmen's leaders. The work of the Congress was defined beforehand in a programme, according to which the following questions were considered: 1. Justification of Trades-Unions; 2. Legislation, Trades-Unions, and the Report of the Parliamentary Commission; 3. Trades-Unions, Political Economy, and Foreign Competition; 4. Is Reduction of the Hours of Labor beneficial to the Nation? 5. Limitation of the Number of Apprentices; 6. Strikes and their Cause and Effects; 7. The Necessity of assimilating the Factory Act and Workshop Bills of 1867; 8. How far will Co-operative Production and Industrial Partnership assist in settling the conflicting Interests of Capital and Labor? 9. The Absolute Necessity of Trades-Unionists having Representatives at the Meetings of the Social Science Congress; 10. Primary Education; 11. The best Means to secure Direct Representation of Labor in the Commons House of Parliament; 12. The Necessity of Working-Class Newspapers, and the best Means of their Establishment.

The proceedings comprised the reading of papers, discussion upon them, and the voting of resolutions expressing the sense of the Congress. Nearly all of the papers were able productions, remarkable for soberness of thought and moderation of expression. No ultra theories, such as find utterance at the labor congresses of the United States and Continental Europe, were propounded, nor any revolutionary remedies proposed. On the subject of trades-unions, and their economic and legal relations, the views advanced were, as could be expected, not free from bias. But even in this connection no unreasonable demands were made by the Congress. While dissatisfaction was expressed with the recommendations of the majority of the Parliamentary Commission of Enquiry instituted in consequence of the Sheffield outrages, nothing more was asked than the full abrogation of the combination laws, and the legal protection for the funds of the trades-unions. Moreover, courts of arbitration, such as already exist in a number of English manufacturing districts for the settlement of disputes between employers and employees, were strongly endorsed as the best means of preventing strikes and lock-outs, which were recognized

as justifiable only in extreme cases of wrong to the labor-interest. The sentiment of the Congress was also very strongly in favor of productive co-operation and industrial partnerships, as affording the surest methods for reconciling the conflicts of labor and capital. In connection with this subject, the very sensible proposition was urged to employ part of the accumulated funds of the trades-unions in co-operative enterprises. The necessity of improving the intellectual condition of the British working population was emphatically recognized, and a resolution in favor of free, national, unsectarian, and compulsory education passed. The importance of relieving the country from the surplus of labor by making the vast amount of waste land in the United Kingdom available for production, and by emigration, was intelligently discussed. A resolution was adopted in favor of eight hours as a legal day's work, but this claim was not, as in the United States, coupled with a demand for the same wages as under the ten-hours' system. On the contrary, the speakers on the subject urged the necessity of leaving the rate of wages to the law of supply and demand. On the subject of apprenticeships, the action of the Congress was less reasonable than in most other respects. A resolution was passed justifying the efforts of trades-unions to limit the number of apprenticeships in trades where the supply is in excess of the demand. But even from this a considerable portion of the Congress dissented. One of the most gratifying features of the proceedings was the unhesitating exposure, by some of the most influential members, of the excessive prevalence of intemperance, and the evils arising from it, among the laboring classes, and the urgent appeals to them to reform their habits.

Statistics of the People's Banks of Germany.—In the first number of this Journal, an account of the history, organization, and management of the People's Banks of Germany was given, together with a table showing their growth from 1859 up to the close of 1867, together with an exhibit of the business of the largest and most flourishing of these co-operative institutions. The annual report for 1868, of Mr. Schulze-Delitzsch, the Actuary of the "Association of People's Banks," which appeared only last summer, enables us to furnish further interesting information regarding them.

The report shows that the number of People's Banks, which was thirteen hundred and four at the end of 1867, increased to fifteen hundred and fifty-eight in 1868. The number of stockholders, which was nearly three hundred thousand in 1867, now largely exceeds that number. As stated in our former article on the subject, the Bureau of the "Association of People's Banks," of which Mr. Schulze-Delitzsch is the chief, receives regular reports from only a portion of the co-operative banks known to be in existence. The following table taken from the report shows the number of banks which have reported to the Bureau from 1859 up to 1868, with the number of their stockholders and the amount of their active and reserve capital, deposits received, of loans contracted and loans made to stockholders in each of the years named:

Year.	Number of Banks.	Number of Members.	Active and Reserve Capital.	Amount of Deposits Received.	Amount of Loans Contracted.	Amount of Loans made to Members.
			Thalers.	Thalers.	Thalers.	Thalers.
1859	80	18,676	276,846	512,350	501,795	4,131,436
1860	133	31,603	528,857	1,322,893	1,069,833	8,478,489
1861	188	48,760	907,213	2,649,036	1,983,441	16,876,009
1862	243	69,202	1,332,438	2,747,577	3,441,033	23,674,261
1863	339	99,175	2,021,250	3,416,220	5,641,820	33,917,848
1864	445	135,013	3,252,757	5,355,265	7,401,317	48,147,495
1865	498	169,595	4,852,558	6,502,197	11,154,179	67,569,903
1866	532	193,712	6,329,504	8,726,518	11,169,011	85,010,145
1867	570	219,358	7,507,085	11,378,570	13,311,669	111,252,134
1868	666	256,337	10,231,457	16,221,592	17,487,445	139,247,793

It appears from this table that, with a capital of 10,231,457 thalers, 16,221,592 thalers in deposits, and 17,487,445 thalers of borrowed money, the six hundred and sixty-six banks reporting to the Bureau made advances in 1868 to the aggregate amount of 139,247,793 thalers. Were the corresponding results of the rest of the fifteen hundred and fifty-eight banks actually in existence known, it would probably appear that the working classes of Germany received advances through the agency of the People's Banks to an amount exceeding two hundred millions of thalers.

The statistical exhibit, printed on the next page, of the twenty-two leading People's Banks, which with two exceptions are the same as those given in the similar table in our first number, shows a growing prosperity with hardly any exception.

STATEMENT OF THE PRINCIPAL PEOPLE'S BANKS OF GERMANY—1868.

Societies.	Number of Members.	Capital.	Deposits on Current Account.	Loans Contracted.	Deposits for a Fixed Period.	Aggregate Amount of Loans to Members.	Number of Loans to Members.	Range of Loans to Members.	Interest paid on Loans to Members.	Dividends.	Losses.
People's Bank of		Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers
Delitzsch	486	14,819*	none	23,701	5,532	160,074	968	3– 2,500	7½	6 1-9	94
Aschersleben	1,100	97,929	none	101,368	none	987,652	4,961	3–14,000	7	7¾	none
Breslau	3,296	120,030	168,391	4,330	209,756	881,309	7,765	2– 4,000	5–8⅓	9 1-6	30
†Berlin	400	32,455	none	none	18,845	435,012	4,458	5– 1,000	10	7½	none
Berlin	500	33,537	none	4,377	37,205	304,154	3,070	10– 2,000	8	5	none
Dresden	1,336	109,143	309,413	20,877	548,359	896,581	4,414	5– 5,000	10	7	10,264
Freiberg	800	86,053	none	225,405	127,169	1,506,354	3,509	2–20,000	9–7	9	1,148
Colberg	872	35,617	none	3,832	87,916	452,024	3,728	5– 3,200	6⅔	7½	none
Gotha	1,644	103,797	457,419	99,740	266,877	694,245	not given	not given	6⅓	7⅔	382
Halle	916	98,759	263,460	141,781	21,534	515,828	4,804	5– 5,800	4–6	6 1-9	1,015
Hanover	1,431	55,820	none	127,287	none	259,564	not given	5– 500	7	8	173
Frankfort (Oder)	1,400	43,673	706,862	46,805	2,291	1,500,934	not given	not given	not given	not given	1,436
Rostock	2,286	204,968	383,794	347,217	103,740	2,248,464	9,605	3– 4,500	7	8⅓	113
Eisleben	400	141,815	757,875	222,024	125,553	1,514,687	6,174	3–20,000	4–6	11	1,198
Zwickau	811	46,166	124,878	415,657	none	507,323	2,833	3–20,000	5¾	not given	2,887
Wiesbaden	2,068	195,490	1,012,843	463,358	339 935	570,535	1,788	10– 6,850	6	7½	4,726
Leipsic	3,753	173,727	229,199	76,723	163,692	554,530	4,940	3– 8,000	7	10	913
Gera	944	50,546	292,001	28,719	306,653	745,452	3,091	2–12,000	5	10	66
Coeslin	418	12,421	none	none	192,980	676,428	2,224	5– 7,000	7	13⅓	none
Crefeld	589	41,554	183,727	6,834	139,708	851,475	24,174	2– 1,200	6	10	none
Mannheim	189	70,433	none	190,571	none	623,383	3,462	3– 3,429	5–6	5	none
Frankfort (Maine)	789	175,828	560,000	none	486,585	3,636,412	7,360	10–10,000	5½	8	none

* All the amounts are in Prussian thalers, equal to seventy cents gold.

† There are eighteen People's Banks in the Prussian capital. The returns of the two principal ones are given.

The report of Mr. Schulze-Delitzsch relates not only to co-operative banks, but also to other co-operative associations in Germany. Besides the former, it enumerates two hundred and thirty-six Raw Material, Trade, Magazine, and Productive Associations, and five hundred and fifty-five Associations of Consumption. The total number of co-operative associations of every description in Germany and the German Provinces in Austria the report estimates at twenty-six hundred, with a membership of nearly one million, a capital of their own of at least fifteen millions, and an additional working capital derived from loans of forty millions. In no other country has co-operation obtained so firm a foothold, and contributed so much to the material well-being of the working classes.

The National Association of German Economists, the International Statistical Congress, and the International Labor Congress.—A "National Association of Economists" has been in existence in Germany since 1858. In its ranks are found the most distinguished social scientists in that country. Its objects are identical with those of the British and American Social Science Associations. The Association of Economists has contributed largely to social progress in Germany by inducing legislation abolishing the guild system and other restrictions upon labor; establishing freedom of domiciliation; removing unjust obstructions to marriage; extending the right of association; modifying the system of indirect taxation; suppressing transit dues, river-tolls, and other hindrances to the free flow of commerce; introducing the metric system of weights and measures, and reforming the mail and telegraph service.

The eleventh annual meeting or Congress of the German Association took place in the first week of September last, at Mayence, under the presidency of Dr. Karl Braun, a prominent member of the North German Parliament. Among the members present were Professors Gneist, Prince-Smith, Lammers, Boehmert, Emminghaus, Faucher, and Dietzel, Messrs. Schulze-Delitzsch, Bamberger, Meyer, Dorn, Michaelis, Rickert, Weber, Wolff, Count Bethusy-Huc, and other well-known economists.

The method of procedure followed by the Association is peculiar to it. At each session certain subjects are formally referred to a corresponding number of committees, which enquire into,

and prepare elaborate reports upon them for the next session. The sessions are devoted to reading, discussing, and taking action upon these reports. The subjects brought before the Congress at Mayence, in accordance with this practice, were: 1. The Legal Relations of Joint Companies; 2. Public Charity, and Legislation relating thereto; 3. Methods of Contracting, and Forms of Public Loans; 4. Liability of the Owners of Industrial Enterprises, including Mines, Manufactures, Railroads and other Common Carriers, in Accidents causing Damage to Persons or Property.

On the first question, Dr. Alexander Meyer, of Breslau, made the regular report. The result of the deliberations of the Congress upon it was a declaration against the right of the state to control the development of joint-stock companies, by making their formation dependent upon its authorization. The report upon the second question was presented by Prof. Boehmert, of Zurich. Its conclusions, which pronounced against the *right* of any needy member of the community to public charity, and against taxation for charitable purposes, led to an exhaustive discussion, the result of which was the recommittal of the question to a committee of five, with instructions to report at the next session. Professor Emminghaus read the report on the third question. After its discussion, the Congress declared the necessity of special legislative regulation of the issue of premium and lottery loans. Dr. Braun submitted the report on the fourth question. The Congress voted that new legislation was required relative to the liability of the owners of manufactories and mines, and of common carriers for damages from accidents.

The International Statistical Congress held its seventh session in the second week of September last, at the Hague. It was attended by official delegates of nearly all the governments of Europe, as well as by a representative of the United States Government, which had not been represented at the last session at Florence. As at the preceding sessions, the subjects brought before the Congress, in accordance with the programme, were considered first in the usual five sections or committees, and subsequently *in pleno*. In the section for the Theory and Application of Statistics, the proper limitation, the methodology and graphic method of statistics; the statistics of still-born children, and the methods of computing mortality tables, formed the sub-

jects of deliberation. The section for Judicial and Commercial Statistics considered the methods for obtaining the statistics of courts of justice, of gratuitous legal assistance to the poorer classes, of mortmain, of bankruptcies, and of joint-stock companies. The section for Finance and Banks occupied itself with the methods of cadastral statistics, and of the statistics of land-banks (*crédits fonciers*), public revenues, taxation, communal revenues, and general banking statistics. The fourth section for Commerce and Fisheries deliberated upon the improvement of the statistics of exports, and sweet-water and salt-water fisheries. The fifth section for Colonial Statistics devoted itself to the consideration of plans for obtaining accurate statistics from the colonial possessions of European powers. In the *plenum*, resolutions in accordance with the reports of the sections were adopted, making recommendations to the several governments upon each of the subjects named.

The International Labor Congress met in September, at Basle, Switzerland. Seventy-two delegates, representing workingmen's associations of the leading countries of Europe and of the United States, attended. The continental element was largely in the ascendency. Strikes and the tenure of real property were the principal subjects considered by the Congress. In relation to both, the most extreme views prevailed. Strikes were proclaimed as the sovereign remedy for the wrongs of the laboring classes at the hands of capitalists, and its universal adoption recommended. In regard to the land question, the Congress voted, by a large majority, in favor of the tenure of all landed property in common by all the members of the community, thus going a step even beyond communism. Altogether, an extraordinary amount of folly and recklessness was exhibited at the Congress.

THE subjoined Abstract of the Programme of Lectures in the Summer Course of 1869 and the Winter Course of 1869–1870, at the Frederick William University at Berlin, is published as an illustration of the opportunities for higher education in Germany.

It will be observed that most of the University Lecturers named are men who have obtained a world-wide reputation by their original investigations. It appears from the Programme that the several faculties are numerically represented as follows:

Theology by seventeen lecturers; Jurisprudence by twenty-one lecturers; Medical Science by fifty-one lecturers; Philosophy by nine lecturers; Mathematical Sciences by eight lecturers; Natural Sciences by twenty-seven lecturers; Political, Economic, and Industrial Sciences by eleven lecturers; History and Geography, including History of Fine Arts, by twenty lecturers; Philology by thirty-one lecturers—making a total of one hundred and ninety-five lecturers on as many different disciplines. In view of this liberal dispensation of knowledge, it is not surprising that a concourse of nearly 2,500 students from all parts of the world is attracted to the Prussian capital.

THEOLOGICAL FACULTY.

SUMMER, 1869.			WINTER, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per Week.
Prof. Benary.	1st and 3d Part of Isaiah	5	Psalms	5
	2d Part of Isaiah	2	1st Book of Samuel	2
	Hebrew and other Semitic Dialects	1	Hebrew and other Semitic Dialects	1
Prof. Dr. Brückner		..	Gospel of St. John	5
			Homiletic Exercises	Not fixed.
Prof. Dr. Dieterici	Genesis	5	Minor Prophets	2

Prof. Dr. Dorner	Epistle of St Paul to the Romans	5	Special Christian Dogmatics	6
	1st Part of Chris. Doctrine, or Apologetics.	5–6	Systematic Theology	2
Lic. Gerlach	Prophecies of Isaiah	5		
Prof. Hengstenberg	Encyclopædia and Methodology of Theology	2		
	Genesis	5		
	History of the Kingdom of God under the Old Covenant	5		
Prof. Lic. Kleinert	Psalms	5	Book of Isaiah	5
	Book of Koheleth	1	Biblical Theology of the Old Testament	3
	Theological Discussions	2	Importance of the Old Testament for the Present Church	1
Prof. Lic. Messner	Epistles of St. Paul to the Corinthians	5	Theological Discussions	2
			Introduc. to the Books of New Testament.	5
			Christology of the New Testament	1
Prof. Dr. Piper	History of Dogma	5	1st Part of Ecclesiastical History	5
	Archæological and Patristic Exercises	2	Archæological and Patristic Exercises	2
Prof. Dr. Rödiger	Genesis	5	Introduction into the Old Testament	5
	Prophecies of Isaiah	5		
Lic. Schmidt	History of Mysticism	1	History of Rationalism and Pietism	2
			History of Œcumenical Councils	2
Prof. Dr. Semisch	Introduction to the New Testament	5	2d Part of Ecclesiastical History	6
	1st Part of Ecclesiastical History	6	History of Christian Doctrine	3
	Confessions of St. Augustine	2	History of Dogma during the Middle Age	1
Prof. Dr. Steinmeyer	Homiletics	2	Practical Theology	5
	Practical Exercises in Homiletics	1	Practical Homiletics	1
	The first three Gospels	5		
Prof. Lic. Strauss	Practical Theology	4	Homiletics	1
	Homiletic Exercises	1	Homiletic Exercises	1
	Catechetical Exercises	1	Catechetical Exercises	1
Prof. Dr. Twesten	Letters to Timothy and Titus	2	Epistle to the Hebrews	6
	Christian Morals	6	Morals according to the Decalogue	2
	Doctrine of the Highest Good according to Schleiermacher's Ethics.	2	Principal Doctrines of the Evangelical Church and the Augsburg Confession	6
	Conversations on Moral Theology	1		

THEOLOGICAL FACULTY—*continued.*

Names of Lecturers.	Summer, 1869. Subjects.	Hours per Week.	Winter, 1869–1870. Subjects.	Hours per Week.
Prof. Lic. Vatke	Introduction to Philosophic Theology	1	Select Dogmas	1
	General Philosophic Theology	6		
Prof. Lic. Weingarten	History of Christian Doctrine	5	1st Part of Ecclesiastical History	5
	History of Modern German Theology	2	Apologeticus of Tertullian	1
	Comparative Symbolism	4	Introduction to the Apocryphal Books of the New Testament	1

LAW FACULTY.

Prof. Baron	Pandects	12	Institutions and Antiquities of Roman Law	4
	Roman Law of Inheritance	4	History of Roman Law	4
	4th Book of Gajus	1	Cicero's Orations in Civil Suits	1
	Prussian Code	5		
Dr. Behrend	History of German Law	4	German Law	5
	Commercial and Marine Law	4	German Commercial and Marine Law	4
	Exercises in German and Commercial Law	1	Exercises in German Law	1
Prof. Berner	Cyclopædia and Methodology of Law	4	Natural Law, or Philosophy of Law	4
	Criminal Law	4	Common and Prussian Criminal Law	4
	Criminal Pleadings	4	Common, Prussian, and Rhenish (French) Criminal Pleadings	2
	Exercises in Criminal Law	1	Law of Nations	3
			On Violations of the Press Law	1
Prof. Beseler	History of German Law	4	German Law, including Feudal, Commercial, and Marine Laws	10
	German Constitutional Law	4		
	Germanistic Exercises	2	Germanistic Exercises	2

Prof. Bruns	Institutions and Antiquities of Roman Law	5
	Roman Civil Pleadings	1
	Common and Prussian Civil Pleadings	5
Prof. Degenkolb	Roman Law of Inheritance	8
	Exegetical Exercises in Roman Law	1
Dr. Eck	Roman Law of Inheritance	4
	Select Civil Cases	1
Dr. Gierke	History of German Municipalities	1
	German Law, including Feudal and Commercial Law	10
Prof. Dr. Gneist	History of Roman Law	4
	Written Exercises on the Pandects	1½
Prof. Dr. Heffter	On the Canon Law	4
	On Matrimony	1
	Law of Nations	4
Prof. Heydemann	Philosophy of Law	4
	Prussian Civil Code	4
	Select Questions of the latter	Not fixed.
Pf. Dr. von Holtzendorff	Political Science	2
	German Constitutional Law	4
	Introduction to the European Law of Nations	1
	Law of Nations	3
Prof. Homeyer	Ancient Saxon Law (Sachsenspiegel)	1
Prof. Hübler	Ecclesiastical Law of Catholics and Protestants	4
	Law of Matrimony	1
Dr. Krüzer	History of Roman Law	4
	Institutions of Gajus	1
	Institutions and Antiquities of Roman Law	5
Prof. Dr. Kühns	German Law, including Feudal, Marine, and Commercial Laws	10
	Commercial Notes and Letters of Exch'ge	2
	Practical Law of the Pandects	12
	Select Passages from the Pandects	1
	Institutions and Antiquities of Roman Law	5
	Select Cases	1
	History of German Municipalities	1
	History of German Law	4
	Law of Inheritance	3
	Common and Prussian Civil Pleadings	4
	On the English Constitution	2
	Canon Law	4
	On Bankruptcy	1
	Cyclopædia and Methodology of Law	3
	Philosophy of Law	4
	Prussian Civil Code	4
	Select Questions of Prussian Law	2
	German and Prussian Constitutional Law	4
	On Political Science	3
	Common, Prussian, and Rhenish Criminal Pleadings	3
	Common and Prussian Criminal Law	4
	History of German Law and States	4
	Ecclesiastical Law of Catholics and Protestants	4
	Law of Matrimony	1
	Law of Inheritance	3
	Roman Civil Pleadings	1

LAW FACULTY—*continued.*

Names of Lecturers.	Summer, 1869. Subjects.	Hours per Week.	Winter, 1869–1870. Subjects.	Hours per Week.
Prof. Lewis	German Statute Law	2	History of German Law and States	4
			Ancient Saxon Law (Sachsenspiegel)	2
			German Constitutional Law	4
Prof. Michelet	Philosophy of Law and its General History	4	Philosophy and General History of Law	4
Prof. Rudorff	Pandects	12	Institutions and Antiquities of Roman Law	5
	Select Passages from the Pandects	1	History of Roman Law	5
Dr. Ryck	On the Seven Leges Damnatæ	1	On the Prætorian Edicts	1
Dr. Schmidt	Cyclopædia and Methodology of Law	3	Cyclopædia and Methodology of Law	3
	Interpretation of the digest "De Solutionibus"	2	Interpretation of the digest "De Solutionibus"	2

MEDICAL FACULTY.

Prof. Albrecht	On the Diseases of the Teeth and Mouth.	2	On the Diseases of the Teeth and Mouth.	2
	On the same, with Demonstrations	6	On the same, with Demonstrations	6
Prof. Bardeleben	On the Diseases of the Joints	1	On Wounds	1
	Exercises in Operations on Dead Bodies	6	Surgical Clinics	9
	Surgical Clinics	9	On Surgery	5
Dr. Bergson	On Pathology and Therapeutics	6	On Pathology and Therapeutics	6
	On Prescriptions, with Exercises	2	On Prescriptions, with Exercises	2
Prof. Böhm	Surgical Operations	3	On Diseases of the Eye and their Cure	2
	Practice in Operations	8	On Eye-glasses and their effects	1
	On the Diseases of the Teeth and their Treatment	1		
Dr. Cohnstein	Theoretical and Practical Obstetrics, with Exercises on the Manikin	4	Theoretical and Practical Obstetrics, with Exercises on the Manikin	4

	Diagnostics and Therapeutics of Diseases of Women	2		
Prof. du Bois-Reymond	First part of Physiology	4	Second part of Physiology	4
	On the Doctrine of Diffusion	1	Investigations in the Physiological Laboratory	Not fixed.
	Investigation in the Physiological Laboratory	Not fixed.		
Prof. Ebert	Clinic and Polyclinic of the Diseases of Children	3	Clinic and Polyclinic of the Diseases of Children	3
Prof. Ehrenberg	History of Medicine	1		
	Comparative Physiology of Infusoria and Entozoa	2		
Dr. Erhard	On Diseases of the Ear	1	On Diseases of the Ear, with Demonstrations	1
Dr. Eulenburg	Pathology and Therapeutics	5	Diseases of the Nerves, with Demonstrations	1
	On Nervous Diseases	1		
Prof. Frerichs	On Pathology and Therapeutics	3	Pathology and Therapeutics	3
	Medical Clinics	9	Medical Clinics	9
Dr. Garcke	On Pharmacognosy	4	On Pharmacognosy	4
Prof. von Gräfe	On Diseases of the Eye and their Cure	2	On the Diseases of the Eye and their Cure	2
	Practical Operations	Not fixed.	Diagnostics of the Diseases of the Eye	Not fixed.
	Diagnostics of the Diseases of the Eye	Not fixed.	Practical Operations	Not fixed.
			Clinic for Diseases of the Eye	6
Prof. Gurlt	On Surgical Bandages, with Exercises	3	Surgical Operations, with Exercises on Dead Bodies	12
			On Fractures and Luxations, with Demonstrations	2
Dr. Guttmann	On Diseases of the Heart	1½	On Diseases of the Heart	1
	On Percussion, Auscultation, and other Methods of Diagnosis	4		
Prof. Hartmann	Osteology of Man	3	Anatomy of the Organs of Senses	1
	Syndesmology	1		
Dr. Helfft	On Medical Climatology	1		
	On the Effects of Mineral Waters in Chronic Diseases	4		
Prof. Hirsch	Cyclopædia and Methodology of Medicine	1	On Pathology and Therapeutics	5

MEDICAL FACULTY—*continued.*

Summer, 1869.			Winter, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per Week.
Prof. Hirsch	Pathology and Therapeutics	5		
	On Historical and Geographical Pathology	1		
Prof. Dr. Jüngken	Surgery	4	Surgery	4
	Wounds, Fractures, and other Injuries	2	Fractures	1
Prof. Dr. Koch			Materia Medica or Pharmacognosy	5
Dr. Kristeller	Select chapters on Gynæcology	3		
	Obstetrical Operations	Not fixed.		
Prof. von Langenbeck	On Surgical Operations	3	On Aciurgy	5
	Surgical Clinic for Operations on the Eye.	6	Surgical Clinic	5
Dr. von Lauer	Medical and Surgical Semiotics	3		
	Medical and Surgical Therapeutics	2		
Prof. Lewin	Clinic of Cutaneous and Syphilitic Diseases	3	Clinic of Cutaneous and Syphilitic Diseases	3
			On Syphilis	Not fixed.
			On Laryngoscopy	Not fixed.
Dr. Liebreich	Materia Medica	4	Practical Exercises in Medical Chemistry.	3
	Practical Exercises in the Laboratory of the Pathological Institute	3	Chemistry of Digestion	1
Prof. Liman	Medical Jurisprudence for Jurists, with Demonstrations	3	Medical Jurisprudence for Jurists and Physicians	3
	Select chapters on Sanitary Polity	1	Pract'l Exercises in Obduct'ns (Autopsies)	Not fixed.
Dr. Lucae	Exercises with the Otoscope	Not fixed.	Anatomy and Diseases of the Ear	1
Prof. Martin	Obstetrics, with Operations	4	Gynæcology and Obstetrics	5
	Obstetric Clinic	5	Gynæcological and Obstetric Clinic	6
	Gynæcological Clinic	3		
Prof. Meyer	Heart Disease	Not fixed.	On Heart Disease	Not fixed.
	Polyclinic	6	Polyclinic	6

Prof. Mitscherlich	Materia Medica	6	Materia Medica	6
	On Stimulants	1	Surgery, with Demonstrations	6
	On the Surgical Diseases of the Urinary and Genital Organs	2		
Dr. Munk	Physiology of the Nerves	1	Physiology of Generation of Men and Animals	1
			Physiology of the Nerves and Muscles with reference to Electropathy	4
Dr. Naunyn	The Pathology of the Urine	1		
	Diseases of the Organs of Respiration and Circulation, with Demonstrations	1		
Dr. Nothnagel	Auscultation and Percussion	3	On Auscultation and Percussion	5
	On Diseases of the Nerves	2		
Dr. Ravoth	Fractures and Luxations, with Exercises on Bandages	4	Hernia	
	Hernia	2		
Prof. Reichert	Comparative Anatomy	4	Anatomy of the Human Body	6
	On the Development of the Body of Man and Animal	2	Anatomy of the Brain and Spinal Marrow	1
	Generation	1	Theory of Histology	1
	Microscopic Anatomy	2	Microscopic Anatomy	Not fixed.
	Exercises in Physiological Laboratory	18	Exercises in Dissections	30
Prof. Rosenthal	On the Physiology of Circulation	1	Experimental Physiology	
	Experimental Physiology	4	Exercises in the Physiological Laboratory	Not fixed.
	Exercises in the Physiological Laboratory,	Not fixed.		
	On Public and Private Sanitary Precautions	1		
Prof. Schneider			Inorganic Pharmacy	3
Dr. Schöller	Obstetric Clinic	4	Theory and Practice of Obstetrics	4
Dr. Schultz	Medical Climatology	2		
	On the Salubrious Effect of the Climate of Italy	1		
Dr. Schultzen	Pathology and Therapeutics of Parasitic Diseases	1		
Prf. Schultz-Schultzenstein	Physiology of the Human Body	6	General Pathology and Therapeutics	4

MEDICAL FACULTY—*continued.*

Summer, 1869.			Winter, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per Week.
Prof. Schultz-Schultzenstein	Homœopathy and Allopathy	1	Materia Medica, with Experiments on Animals	6
			Cyclopædia and Methodology of Medicine.	2
Dr. Schweigger	Theory of the Dilatory	1	Special Pathology and Therapeutics	5
	Diseases of the Eye	3		
Dr. Senator	On Diagnostical Analysis of the Urine	1	On the diseases of the Chylopoetic System.	1
Prof. Skrzeczka	Medical Jurisprudence for Physicians	3	Medical Jurisprudence for Jurists	3
	Medical Jurisprudence for Jurists	3	Medical Jurisprudence for Physicians	3
	Exercises in Obductions	Not fixed.		
Dr. Tobold	On Laryngoscopy, with Practical Exercises	1	Laryngoscopy, with Practical Exercises	Not fixed.
			Auscultation and Percussion	Not fixed.
Prof. Traube	Preparatory Clinic and Auscultation	12	Preparatory Clinic, and Auscultation and Percussion	12
Prof. Dr. Virchow	Pathological Anatomy	4	Pathological Anatomy	6
	Demonstrations in Pathological Anatomy,	6	Demonstrations in Pathological Anatomy and Microscopy	6
	Pathological Histology	6	Pathological Histology	6
	Diseases of the Heart	2	Diseases of the Heart	2
Dr. Waldenburg	Laryngoscopy, with Exercises	1	Laryngoscopy, with Exercises	1
	Auscultation, Percussion, and Laryngoscopy	Not fixed.	Auscultation, Percussion, and Laryngoscopy	Not fixed.
Dr. Wolff	Surgical Anatomy of the Extremities	1	Anatomy on Living Persons	1
	Surgical Anatomy, with Demonstration	2	Surgical Anatomy	3
Dr. Zülzer	Materia Medica, with Experiments	3	Materia Medica, with Experiments	3
	Introduction to Medical Statistics	2	Medical Statistics, with Practic. Exercises	2
Prof. Westphal	Psychiatria	2	Psychiatria	2
	Clinic on Nervous Diseases		Clinic on Nervous Diseases	

PHILOSOPHICAL FACULTY.

A.—PHILOSOPHY PROPER.

Prof. Althaus	History of Philosophy to the 18th Century	4	History of Philosophy	5
	Aristotle's Views on Politics compared with Plato's	2	History of Modern Philosophy	2
Dr. Dühring	Critical History of Philosophy	4	Logic and Noemics	3
Prof. Gruppe	Introduction into Philosophy	2	Logic and General Review of Philosophy	4
Prof. Harms	On the Methods of Academical Study	1	History of Greek Philosophy	2
	History of Modern Philosophy since the end of the Middle Ages to the time of Hegel and Schleiermacher	1	Philosophy in General, and Natural Philosophy in Particular	4
	Anthropology and Psychology	4	Logic	4
Dr. Märcker	Ethics of Aristotle	1	Natural Philosophy of the Ancients	4
Prof. Massmann	On Questions of Pedagogy	1	On Questions of Pedagogy	1
Prof. Michelet	Anthropology and Psychology	4	Logic and Encyclopædia of Philosophical Science	4
Prof. Trendelenburg	Exegetic and Catechetic of the 1st Book of Aristotle on Rhetoric	2	Exegetic of Aristotle's Book on the Ethics of Nicomach	2
	Pedagogy and Didactics, with History of Education and Instruction	4		3
Prof. Werder	Logic and Metaphysics	4	Psychology and Anthropology	3

B.—MATHEMATICAL SCIENCES.

Dr. Auwers			Select Chapters of the Science of Fixed Stars	2
Prof. Dr. Förster	Spherical Astronomy and Theory of Instruments	4	On the Determination of the Orbits of Planets and Comets	4
Dr. Hoppé	Analytical Mechanics	4		
	Theory of Elliptical Functions	4		
	Differential Calculus and Theory of Series	4		
Dr. Kronecker			The Application of the Analysis of the Infinite to the theory of Quadratic Forms	3

PHILOSOPHICAL FACULTY—*continued.*

Summer, 1869.			Winter, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per Week.
Prof. Kummer	On the Theory of Curved Surfaces and Curves of Double Curvature	4	Analytical Mechanics	4
Prof. Ohm	The Scientific Basis of Mathematical Analysis	3	On Fourier's Theory of Series	2
Dr. Thomé			Differential Calculus	4
			Integral Calculus	4
Prof. Weierstrass	Theory of the Abellian Functions	4	Calculus of Variations	4
			Modern Synthetical Geometry	4
	C.—NATURAL HISTORY.			
Dr. Ascherson			On the Families of Dicotyledonous Plants	4
			On the Geography of Plants	2
Prof. Baeyer	Practical Exercises in Organic Chemistry	48	Practical Exercises in Organic Chemistry	48
	1st Part of Organic Chemistry	4	2d Part of Organic Chemistry	4
Prof. Beyrich			On Petrifactions	5
			On Geognosy, with especial reference to Alluvial Rocks	4
Prof. Braun	General Botany, Morphology, Anatomy, and Physiology of Plants	6	Botany according to the Natural System	4
Prof. Dove	Experimental Physics	4	On Cryptogamic Botany	1
	Theory of Optical Instruments	1	Experimental Physics	4
Prof. du Bois-Reymond			Meteorology	2
			On Certain Results of Modern Investigation	1
Prof. Erman	On the Theory of Light and its Application		Physical Laws of the Earth, or Theory of Geographical and Cosmical Phenomena	3
	Theoretical and Practical Instructions for Observations on Land and Sea	Not fixed.	On Scientific Mensuration	2

Dr. Gerstäcker	Entomology	3	Entomology	
Prof. Hoffmann	Experiments in Chemistry	45	Experimental Chemistry	6
	Organic Chemistry	6	Select Chapters of Chemistry	Not fixed.
			Exercises in Chemistry	45
Dr. Kny	Anatomy and Physiology of Plants	3		
	Instructions in the Use of the Microscope	4		
	Anatomical and Physiological Investigations	20		
Prof. Koch	Systematic Botany	4	General Botany	
	Exercises in Classifying Plants	1		
Dr. Laspeyres	On Rock Minerals (Ores)	3		
	Geognosy Abridged	2		
Prof. Magnus	Exercises in the Physical Laboratory	Not fixed.		
Dr. Oppenheim	Theories of Chemistry since Stahl	1		
	Organic Chemistry	Not fixed.		
Prof. Peters	Zoölogy	6		
	Zoötomy, or Comparative Anatomy	Not fixed.		
	Zoölogical and Zoötomical Investigations	4		
Prof. Poggendorff	General History of Physical Science	2	Physical Geography	2
Prof. Quincke	Introduction to Mathematical Physics	4	Theory of Light	4
	Theory of Capillarity	1	1st Part of Inorganic Chemistry	4
Prof. Rammelsberg	2d Part of Inorganic Chemistry	4	Chemical Foundation of Metallurgy	1
	Chemical Foundations of Geology	1		
Prof. Rose	Mineralogy Abridged	2	Mineralogy	6
Prof. Rose	Geognosy	4	General and Chemical Geology	2
Prof. Roth	History of Geology	6	General and Chemical Geology	2
Prof. Schneider	Experimental Chemistry	6	Organic Chemistry	5
	Iron, Nickel, and Cobalt	1	Organic Bases	1
	Quantitative Analysis	3		
Dr. Schneider	Exercises on Zoölogy	Not fixed.		
Prof. Schultz-Schultzenstein	Medical and Agricultural Natural History	5		
	Theoretical and Medical Botany, with Physiological and Microscopical Observations and Demonstrations	6		
	Botanic Excursions	Not fixed.		

PHILOSOPHICAL FACULTY—*continued.*

Summer, 1869.			Winter, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per Week.
Dr. Sell	Chemistry of Everyday Life	1	Analytical Chemistry, including the Analysis of Gases	2
Dr. Sonnenschein	Practical Exercises in Chemistry	48	Analytical Chemistry	3
	Conversations on Chemistry	Not fixed.	Conversations on Chemistry	Not fixed.
	On Pharmacy	3	Practical Exercises in Chemistry	48
Dr. Wichelhaus	Theoretical Chemistry	3	Organic Chemistry	4
	Scientific Chemical Investigations	Not fixed.		
	D.—POLITICAL, ECONOMIC, AND INDUSTRIAL SCIENCES.			
Dr. Dühring	Political Economy	4	Political Economy	4
Prof. Friedländer	On Science of Finance	4	Political Economy	4
Prof. Hanssen	Political Economy	4		
Prof. Helwing	Political Economy and Science of Finance	4	Principles of Inter. Public Administration	4
Prof. Koch	Agricultural Botany, with Demonstrations and Excursions	4	Agricultural Botany	
Prof. Magnus	Technology, with Experiments	5		
Prof. von Raumer	History of Constitutions and of Political Science	1		
Dr. Schultz	Select chapters of Internal Polity	2	Select chapters on Domestic Polity.	
Dr. Gerstäcker	On the Insects useful or detrimental to Agriculture	2		
Prof. Thaer	Principles of Rational Agriculture	4	Critical Encyclopædia of Agricultural Science	4
	Select chapters on Agriculture and Stock Raising	2	Select chapters on Agriculture and Stock Raising as in 1869	2
Dr. Oppenheim			Chemical Technology	1

E.—GEOGRAPHY AND HISTORY.

Dr. Bastian			Ethnology and Anthropology		4
			On the Nations of the Buddhist faith		1
Prof. Curtius	Ancient Geography and Ethnography	5	History of Athens		1
Prof. Droysen	First part of Ancient History	4	History of Greece		4
	Prussian History from 1640	4	History of the Epoch of Revolution		5
	Historical Exercises	Not fixed.	Historical Exercises		Not fixed.
Dr. Dühring			Historical Opinions of Prominent Historians, Politicians, Economists, and Philosophers		1
Dr. Erdmannsdörffer			Prussian History from the Treaty of Hubertsburg (1763)		4
Dr. Hassel	Modern History of the Principal States of Europe since 1830	4	History and Literature of France since 1830		1
Prof. Jaffé	Chronology of Roman History and the History of the Middle Ages	3	Historical Exercises in Modern Prussian History		Not fixed.
	Exercises in History and Diplomacy	1			
Prof. Kiepert	Ancient Geography and Ethnography	2	Ancient Geography and Ethnography		1
	Geography of Ancient Africa	2			
Prof. Köpke	Historical Exercises	2	Modern History from the End of the 15th Century		4
Prof. Lepsius			History of Egypt		1
Prof. Mommsen	Constitution and History of Rome under Diocletian and his successors	4			
Prof. Müller	Geography and States of Asia	4	Geography and States of the New World		2
	Geography and States of Germany	2	Geography and Ethnography of Europe		4
Prof. Ranke	History of the 19th Century	4	History of the Middle Ages since the 9th Century		4
			Historical Exercises		Not fixed.

F.—ARTS AND THEIR HISTORY.

Prof. Bellermann	Third part of the History of Music	2	Music of the Ancient Greeks		2
	Elements of Musical Theory and Composition	2	Exercises in the Counter-point		2

PHILOSOPHICAL FACULTY—*continued.*

Summer, 1869.			Winter, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per week.
Prof. Curtius	On Greek Coins and their Significance for Archæology	3	Archæology of Greek and Roman Art	4
	Practical Exercises in Classical Archæology	1	Archæological Exercises	1
Prof. Friedrichs	History of German Art, with Demonstrations in the Royal Museums	4	Archæological Exercises	2
	History of Ancient Glyptic, with Archæological Exercises	2		
Prof. Hotho	Poetic and History of Poetry	4	Æsthetics and History of Art	4
Prof. Lepsius	History of Egyptian Art	1	Egyptian Monuments	1
Dr. Märcker	Rhetoric, with Exercises	2	Rhetoric	1
	Philosophy of the Art of the Ancients	4	Rhetorical Exercises	1
Prof. Werder			Dramatic Art	1
	G.—PHILOLOGY.			
Dr. Bastian	Language and Literature of the Indo-Chinese	2		
Prof. Bekker	Oration of Æschines against Ctesiphon	2		
Prof. Benary	Hebrew and other Semitic Dialects	Not fixed.		
Prof. Bonitz	Interpretation of Plato's Dialogues	2	Writings and Philosophy of Aristotle, and the Poetry of the same	2
Prof. Dieterici	Several Arabic Authors	1	Arabic Grammar	3
	Koran, and Syntax of the Arabic Language	2	Several Arabic Authors	1
Dr. Erdmannsdörffer	History of Humanism in Italy	1		
Lector Fabbrucci	History of Italian Literature	3	History of Italian Literature	3

Lector Fabbrucci	Italian Grammar	2	Italian Grammar	2
Prof. Friedrichs			The Private Life of the Greeks	4
Prof. Geppert	Truculentus, by Plautus	2	History of Greek Literature	4
	Greek and Latin Metric	4		
Dr. Haarbrücker	Koran, and other Arabic Authors	1	Syriac Language	2
	Religious Doctrines of the Koran	3		
Prof. Haupt	Elegiacs of Tibullus	4	Satires of Horace	4
	Idyls of Theocritus	4	Iliad of Homer	4
Prof. Hübner	Methodology and Cyclopædia of Philology	4	Methodology and Cyclopædia of Philology	4
	Latin Epigraphy	3	Latin Grammar	4
	Agricola of Tacitus	1	Cicero's Rhetorical Writings	1
			Greek Mythology	3
Dr. Johaentgen	The Grammatical Sutra of Parini	2	Law of Manu	2
Prof. Kirchhoff	Greek Dialects	4	Oration of Demosthenes against Leptines,	4
	Works and Days of Hesiod	4	Epigraphical Exercises	Not fixed.
Prof. Köpke	History of Modern Literature since the Sixteenth Century	4	Political Antiquities of the Greeks	2
Prof. Lepsius	Egyptian Grammar	3	Egyptian Grammar	3
	Life and Customs of the Ancient Egyptians	1		
Dr. Märcker			Lucretius on the Nature of Things	1
Prof. Massmann	Manuscripts	Not fixed.	Manuscripts	Not fixed.
	Agricola of Tacitus	2		
Dr. Michaelis	German Stenography	2	Language, Letters, and Orthography	2
	Language, Letters, and Orthography	2		
Prof. Mommsen	Select Chapters of the Acta Arvalia	1	The Chapters of Gellius concerning Law,	1
	Exercises on Roman Antiquities	2	Political Antiquities of the Romans	4
Prof. Mullach	Agamemnon of Æschylus	4	Exercises in interpreting Thucydides	2
	Odes of Horace	1	The Olynthiac Orations of Demosthenes	1
Prof. Müllenhoff	German Grammar	4	History of Ancient German Poetry	4
	Old German Metric, with interpretation of "Des Minnesang's Frühling"	4	Germania of Tacitus	4
Dr. Pietraszewski	Grammars of the Persian and Zend Languages	2	Gram. of Persian and Zend Languages	3
	Grammar of the Turkish Language	4	Grammar of the Turkish Language, with Translation of the "Kirk Wezir"	4

PHILOSOPHICAL FACULTY—*continued.*

	Summer, 1869.		Winter, 1869–1870.	
Names of Lecturers.	Subjects.	Hours per Week.	Subjects.	Hours per Week.
Prof. Rodiger	Difficult Arabic Authors	1		
	Select Passages of Syriac Authors	1		
Prof. Schott	Eastern Turkish or Tschagatai	2		
	Buddhism of the Chinese	1		
Dr. Solly	History of English Literature	1	History of English Poetry from the Seventeenth Century	
	English Poetry and its History	2		
Prof. Steinthal	On Language in General, and the Romance Languages in Particular	4	Methodology and Cyclopædia of Philology	4
			On the Character of the Indo-Germanic Languages	4
			History of the Science of Language	2
Prof. Tobler	Select Passages of old French Authors	3	Chevalier au Lyon of Chrestien de Troies,	4
	History of Provençal Literature	2	Provençal Language	2
Prof. Weber	Sanskrit Grammar	3	Sanskrit Grammar	3
	The Meghaduta of Kalidasa	2	The Meghaduta of Kalidasa	
	Hymns of the Rigveda or Atharvaveda	3		
	Zend or Pali Language	2		
Dr. Wetzstein	Life and Habits of the Arabs	2	Interpretation of the Koran	2

CONSTITUTION

OF THE

AMERICAN SOCIAL SCIENCE ASSOCIATION.

ADOPTED, IN BOSTON, OCTOBER 4, 1865; AMENDED OCTOBER 13, 1869.

ARTICLE I. This Society shall be called the American Social Science Association.

II. It shall include four departments: the first, of Education; the second, of Health; the third, of Finance; the fourth, of Jurisprudence.

III. It shall be administered by a President, Treasurer, and Secretary; an Executive Committee, charged with general supervision; four Department Committees, established by the Executive Committee, charged with the supervision of their respective departments; and such local committees as may be established by the Executive Committee at different points to serve as branch associations.

The Executive Committee shall consist of the President, Treasurer, and Secretary, the Chairman of each of the Departments, and ten Directors, with power to fill vacancies.

The President, Treasurer, Secretary, and Directors shall be chosen annually on the second Wednesday of October, and shall hold office till their successors are chosen. The President shall be Chairman of the Executive Committee. The Chairmen of the Department and Local Committees shall be chosen at the pleasure of their respective committees.

IV. Any person may become a member by paying five dollars, and may continue a member by paying annually such further sum, not exceeding ten dollars, as shall be fixed at the annual meeting. Any person may become a life-member, exempt from assessments, on payment of one hundred dollars. Honorary and corresponding members may be elected, and exempted from the payment of assessments.

V. The Executive Committee shall have sole power to call and conduct General Meetings, and to publish the transactions and other documents of the Association. The Department Committees shall have power to call and conduct Department Meetings.

VI. No amendments of this Constitution shall be made, except at an annual meeting, and with public notice of the proposed amendments.

LIST OF NEW MEMBERS.

THE following persons have joined the Association since June last:

NEW YORK.

John Adriance,
Henry T. Anthony,
John Armstrong,
D. G. Bacon,
H. R. Baltzer,
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Dr. Fordyce Barker,
Francis C. Barlow,
Samuel T. Barlow,
F. A. P. Barnard,
Hiram Barney,
N. M. Beckwith,
H. W. Bellows,
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Dr. N. Bishop,
Philip Bissinger,
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George Bliss, Jr.,
W. B. Bonn,
Vincenzo Botta,
J. H. Boynton,
J. Crosby Brown,
James M. Brown,
Samuel Brown,
Thomas Burke,
Charles Butler,
Dr. Alfred L. Carroll,
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William F. Cary,
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S. B. Chittenden, Jr.,
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George J. Cook,
E[illegible]ward Cooper,
Edw[illegible]in M. Cox,
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Dr. J[illegible] Crane,
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Charles M. [illegible]avison,
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H. F. Dimock,
D. B. Eaton,
Leopold Eidlitz,
Dr. Louis Elsberg,
Benjamin H. Field,
David Dudley Field,
Dudley Field,
Francis Forbes,
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Roswell D. Hatch,
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A. S. Hewitt,
Dr. H. von Holst,
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Frank E. Howe,
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Richard M. Hunt,
Dr. Abraham Jacobi,
Dr. Lewis G. Janes,
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Samuel G. Jelliffe,
Alvin J. Johnson,
George Jones,
Thomas Kinnicutt,
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William Kuttruff,
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Montague R. Leverson,
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William C. Martin,
George B. Mead,
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R. B. Minturn,
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Charles Nordhoff,
H. G. Norton,

Henry D. Noyes, M.D.,
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H. Oelrichs,
Charles N. Peabody,
E. R. Peaslee, M.D.
George Perry,
J. E. Perry,
Frederick De Peyster,
John K. Porter,
H. C. von Post,
Clarkson N. Potter,
James Prentice,
L. Bradford Prince,
Charles M. Rogers,
Johannes Roesing,
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Alfred Schlessinger,
L. W. Schmidt,
Gustavus Schwab,
Prof. A. J. Shem,
Samuel Shethar,
Samuel Sinclair,
James Stokes, Jr.,
Russell Sturgis, Jr.,
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Merritt Trimble,
Henry Verhaven,
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Salem H. Wales,
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William W. Harding,
Alexander Henry,
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H. C. Hickock,
Nathan Hilles,
Edward Hopper,
William A. Ingham,
B. Andrews Knight,
J. Lambert,
Henry C. Lea,
Isaac Lea,
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Dr. Benjamin Lee,
Enoch Lewis,
Walter H. Lowrie,
James R. Ludlow,
John A. McAllister,
P. McCall,
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S. V. Merrick,
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Dr. S. Weir Mitchell,
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J. S. Newbold,
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Redwood F. Warner,
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A. Whitney,
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Andrew M. Howland,
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Henry P. Kidder,
Mrs. H. P. Kidder,
Francis L. Lee,
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Prof. A. P. Rockwell,
S. P. Ruggles,
Prof. John D. Runkle,
Elbridge Smith,
W. R. Ware.

CAMBRIDGE.

Pres. Charles Wm. Eliot,
E. C. Larned,
Prof. J. M. Peirce,
Prof. N. P. Shaler.

MISCELLANEOUS.

Francis Bacon, New Haven, Conn.
George A. Blanchard, Concord, N. H.
David J. Brewer, Leavenworth, Kan.
Hon. E. Casserly, U.S.S., Washington.
Frederick Church, Hudson, N. J.
Dawson Coleman, Lebanon, Pa.
H. P. Crozier, Brooklyn, N. Y.
E. F. M. Faehtz, Washington.
E. H. Hall, Worcester, Mass.
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George A. Matile, Washington.
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Edward N. Perkins, Jamaica Plains, Mass.
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Miss Joanna Rotch, Milton, Mass.
Henry D. Sedgwick, Stockbridge, Mass.
C. O. Thompson, Worcester, Mass.
Miss Anne W. Weston, Weymouth, Mass.
Maj.-Genl. Thomas J. Wood, Dayton, Ohio.

LIST OF WORKS RELATING TO SOCIAL SCIENCE PUBLISHED IN 1869.

THE following bibliographical record does not include periodical publications. A list of such will be printed in our future volumes. Completeness is not claimed for the present list, but it is believed to contain all really noteworthy works.

Académie des Sciences Morales et Politiques (Institut Impérial de France). Séances and Travaux de l'. Compte-Rendu sous la direction de Mignet. 28e Année. Paris. 8vo.

Achenbach, H.—Das französische Bergrecht und die Fortbildung desselben durch das preussische allgemeine Berggesetz dargestellt. Bonn. 8vo.

Ahrens, H.—Naturrecht oder Philosophie des Rechts und des Staates. Auf dem Grunde des ethischen Zusammenhanges von Recht und Cultur. I. Band. Wien. 8vo.

Allen, N.—The Intermarriage of Relations. New York. 12mo.

Physical Culture in Amherst College. Lowell. 12mo.

Almanack de la Co-operation, L'.

An Analysis of the Indian Penal Code (Act 45, of 1860). With Notes. By J. Cutler and E. F. Griffin. London. 8vo.

Annuaire de l'Économie Politique et de la Statistique. Par Maurice Block. 26e Année 1869. Paris. 12mo.

Assailly, Ch. d'—Le Paupérisme et les Associations Ouvrières en Europe. Paris. 8vo.

Associations Ouvrières en Angleterre (Trades-Unions). Par le Comte de Paris. Paris. 8vo. (English Translation, London.)

Backhaus, J. C. N.—Die Schulgesetzgebung der Gegenwart. Osnabrück. 8vo.

Baker, V.—Army Reform. London. 8vo.

Barnard, F. A. P.—The Recent Progress of Science, with an Examination of the Asserted Identity of the Mental Powers with Physical Forces. New York. 8vo.

Barthel, C.—Schulpädagogik. Breslau. 8vo.

Baxter, R. Dudley—The Taxation of the United Kingdom. London. 8vo.

Béchard, Fd.—Autonomie et Césarisme. Introduction au Droit Municipal Moderne. Paris.

Beltrani Scalia, Mt.—Sul governo e sulla riforma delle carceri in Italia, saggio storico e teorico. Torino. 8vo.

Besnier de la Pontonerie, E.—Sociétés Coopératives et Professionnelles d'Assurance sur la Vie (Sociétés Libres à Capital et Membres Variables). Paris. 8vo.

Birnbaum, K. — Ueber die Grundlagen der Bodentaxation und Bodenbesteuerung. Leipzig. 8vo.

Blake, W. P.—The Production of the Precious Metals; or, Statistical Notices of the Principal Gold and Silver Producing Regions of the World. With a chapter upon the Unification of Gold and Silver Coinage. New York and London. 8vo.

Bluntschli's Staatswörterbuch, in 3 Bänden. Zürich. 8vo. I. Bd., p. 161–320.

Böhmert, O.—Die Erfindungspatente nach volkswirthschaftlichen Grundsätzen und industriellen Erfahrungen, mit besonderer Rücksicht auf England und die Schweiz. Berlin. Gr. 8vo.

Bushnell, H.—Women's Suffrage. New York. 12mo.

Butler, J. E.—Woman's Work and Woman's Culture. London. 12mo.

Clavé, J.—Principes d'Économie Politique. Paris. 18mo.

Cockburn, Alex.—Nationality; or, The Law relating to Subjects and Aliens considered with a View to Future Legislation. London. 8vo.

Cohn, G.—Ueber die Bedeutung der Nationalökonomie und ihre Stellung im Kreise der Wissenschaften. Berlin. 8vo.

Conrad, J.—Die Findelanstalten, ihre geschichtliche Entwickelung und Umgestaltung in der Gegenwart. Jena. 8vo.

La Liberté Commerciale et les Résultats de Traité de Commerce de 1860. Paris. 8vo.

La Question Monétaire. 2e Édition. Paris. 8vo.

Co-operative Congress, Proceedings of the, held in London, 1869. Edited by J. M. Ludlow. London. 8vo.

Dameth—Le Mouvement Socialiste et l'Économie Politique. Paris et Lyon. 12mo.

Das Verbrecherthum im Preussischen Staat. Von Herrmann v. Valentini. Leipzig.

Davis, H. F. A.—Manual of the Law Relating to Industrial and Provincial Societies. London. 12mo.

Degen, L.—Practisches Handbuch für Einrichtungen der Ventilation und Heizung von öffentlichen und Privatgebäuden. München. 8vo. Mit 2 Tafeln, Abbildungen.

Deinhardt, H.—Ueber Lehrerbildung und Lehrerbildungs-Anstalten. Wien. 8vo.

Des Réformes à introduire dans l'Organisation des Conseils de Prud'-hommes. Paris. 8vo

Droop. H. R.—Political and Social Effects of Different Methods of Electing Representatives. London.

Douay, Edm.—Le Suicide; ou, La Mort Volontaire. Paris. 18mo.

Educational Calendar and Scholastic Year-Book for 1869. Third Year. London. 8vo.

Edwards, E.—Free Town Libraries; their Formation, Management, and History, in Britain, France, Germany, and America. Together with Brief Notices of Book-Collectors, and of the respective Places of Deposit of their Surviving Collections. London. 8vo.

Emminghaus, A.—Das Armenwesen und die Armen. Gesetzgebung in Europäischen Staaten. Berlin. 8vo.

Encyclopädie der Rechtswissenschaft in systematischer und alphabetischer Bearbeitung. Herausgegeben unter Mitwirkung vieler namhafter Rechtsgelehrte von Fr. v. Holtzendorff. (In 3 Bdn. oder 25 Lfgn.) I. Thl., Systematische Darstellung. Leipzig. 4 Pr.

Encyklopädie des gesammten Erziehungs- und Unterrichtswesens bearb. von einer Anzahl Schulmänner und Gelehrten. Gotha, Besser.

Essays on Political Organization. Union League, Philadelphia.

Festenberg-Pakisch, H. v.—Geschichte des Zollvereins mit besonderer Berücksichtigung der staatlichen Entwickelung Deutschlands. Leipzig. 8vo.

Flinzer, M.—Ueber die Anforderungen der öffentlichen Gesundheitspflege an die Schulbänke. Chemnitz. 8vo.

Foucart, E.—La France et les Traités de Commerce; ou, Tarifs des Droits de Douanes applicables aux Produits compris dans les Conventions Internationales conclues avec l'Angleterre, l'Autriche, la Belgique, le royaume d'Italie, la Norvége, les Pays-Bas, les États-Pontificaux, le Portugal, la Suède, la Suisse et le Zollverein. Paris. 8vo.

Gaillardin, C.—Les Devoirs des Administrateurs des Sociétés de Secours Mutuels. Paris. 12mo.

Gneist, R.—Verwaltung—Justiz—Rechtsweg. Staatsverwaltung und Selbstverwaltung nach englischen und deutschen Verhältnissen, mit besonderer Rücksicht auf Verwaltungsreformen und Kreisordnungen in Preussen. Berlin. 8vo.

Greeley, H.—Political Economy. Boston.

Groser, W. H.—"Does Education lessen Crime?" London. 8vo.

Grundeigenthum und Hypothekenrecht, Die preussischen Gesetzentwürfe über—nebst Motiven. Berlin. 8vo.

Herrmann, E.—Die Theorie der Versicherung vom wirthschaftlichen Standpunkte. 2 Auflage. Graz. 8vo.

Hilgard, Th.—Ueber Beibehaltung oder Abschaffung der Todesstrafe. Mit besonderer Beziehung auf Mittermaier's letzte Schrift über diesen Gegenstand. Stuttgardt. 8vo.

Hirsch, C.—Die Organisation der deutschen Arbeiterpartei. Berlin. 8vo.

Hodgson, W. B.—The Education of Girls and the Employment of Women of the Upper Classes, Educationally Considered. Second Edition. London. 8vo.

Holtzendorff, F. v.—Die Principien der Politik. Berlin. 8vo.
Honegger, J. J.—Grundsteine einer allgemeinen Culturgeschichte der neuesten Zeit. B. 2. Leipzig. 8vo.
Huber, V. A.—Die Arbeiterfrage in England. (Sociale Fragen VII.) Nordhausen. 8vo.
Isnard, J.—Questions Sociales. Le Bien-être, la Famille et l'Assurance. Péronne, imp. Quentin. Paris. 8vo.
Jaeger, J.—Der menschliche Verkehr und seine Theorie. Ein Beitrag zur Socialwissenschaft. München, Franz. 8vo.
Jeannel, J.—Die Prostitution in den grossen Städten im XIX. Jahrhundert und die Vernichtung der venerischen Krankheiten. Uebersetzt und mit Zusätzen versehen von F. W. Müller. Erlangen. 8vo.
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Journal of Social Science, containing the Transactions of the American Association. New York: Leypoldt & Holt. No. 1. 8vo.
Karup, W.—Theoretisch-praktisches Handbuch der Lebensversicherung. I. Abth.—Geschichte der Lebensversicherungen und deren Literatur, nebst Einleitung in die Lebensversicherungswissenschaft. II. Abth. — Die Mortalitätsstatistik und die Wahrscheinlichkeitslehre mit besonderer Rücksicht auf Lebensversicherungswesen, nebst den Mortalitätstafeln. Leipzig.
Kehr, C.—Die Praxis der Volksschule. 3 Aufl. Gotha. 8vo.
Kempner, Friederike—Gegen die Einzelhaft oder das Zellengefängniss. Breslau. 8vo.
Kerbert, J. J.—L'Habitation de l'Homme dans ses Rapports avec la Santé et la Vie. Discours populaire hygiénique. Paris. 8vo.
Kick, F.—Ueber die Fixirung der Arbeitszeit. Mit einem Anhange: die Behandlung dieser Frage in einem Vereine. Prag. 8vo.
Király, F. v.—Betrachtungen über Socialismus und Communismus in ihrem Verhältniss zu den Grundformen des Rechts, zur politischen Oekonomie, zur socialen Praxis und zur Politik. Leipzig. 8vo.
Klostermann, R.—Die Patentgesetzgebung aller Länder nebst den Gesetzen über Musterschutz und Waarenbezeichnungen. I. Hälfte. Berlin. 8vo.
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Kühns, F. J.—Ueber den Ursprung und das Wesen des Feudalismus. Berlin. 8vo.
Laboulaye, E.—Les Maux de la Guerre et les Bienfaits de la Paix. Paris. 12mo. (Bibliothèque de la Paix, 7e livraison.)
Labor in the Agricultural and Manufacturing Districts; its Causes and Effects. London. 8vo. With Maps and Diagrams.
Lacointa, J.—Étude sur la Formation et l'État actuel des Lois criminelles en Europe. Montpellier. 8vo.
Laspeyres, E.—Der Einfluss der Wohnungen auf die Sittlichkeit. Eine moralstatistische Studie über die arbeitenden Klassen der Stadt Paris. Berlin. 8vo. Mit 42 Tabellen.
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L'Avenir de l'Enseignement populaire. Paris. 8vo.
Le Borgne, G.—Influence de l'Éducation sur la Mortalité et le Bien-être des Classes Ouvrières. Paris. 8vo.
Lecky, W. E. H.—History of European Morals from Augustus to Charlemagne. 2 vols. 8vo.
Leeds, Lewis W.—Lectures on Ventilation. Being a Course delivered in the Franklin Institute of Philadelphia. New York. 8vo.
Le Mouvement Socialiste et l'Économie politique. Par H. Dameth, Professeur d'Économie politique à l'Académie de Genève. 1 vol. in 12mo. Paris: Guillaumin.
Le Progrès. Paris. 8vo.
Leroy-Beaulieu, P.—Recherches Économiques, Historiques et Statistiques sur les Guerres Contemporaines (1853-1866). Paris. 8vo.
Lombard, A.—L'Institution du Dimanche dans ses Rapports avec la Société. Genève. 8vo.
Lubbock, J.—A Proposal to Extend the System pursued by Her Majesty's Civil Service Commissioners to Candidates for Commercial Appointments. London. 8vo.

Manfrin, Pietro.—Il Sistema municipale inglese e la Legge comunale italiana. Vol. I. Firenze. 8vo.

Marais, A.—L'École et la Liberté. Avec préface par E. Pelletan. Paris. 8vo.

Mayo, A. D.—Religion in the Common Schools. Cincinnati. 12mo.

Mézières, A.—La Société Française: le Paysan, l'Ouvrier, la Bourgeoisie, l'Aristocratie, les Femmes. Études Morales sur le Temps Présent. Paris. 8vo.

Mill, J. S.—The Subjection of Women. Second Edition. London. 8vo.

Mohl, Rob. v.—Staatsrecht, Völkerrecht und Politik. Monographieen, 3 Bd. Politik, 2 Bd. Tübingen. Lex. 8vo.

Monnier, F.—De l'Organisation du Travail Manuel des Jeunes Filles. Les Internats Industriels. Rapport présenté à la Société de Protection des Apprentis et des Enfants employés dans les Manufactures. Paris: Chaix et Cie. 8vo.

Müller, J.—Der Mensch. Principien und Ideen zu seinem Leben. Staat und Religion. Leipzig. 8vo.

National Association for the Promotion of Social Science, Sessional Proceedings of the. Vol. II. Nos. 17–20. 8vo.

Naville, E. — Die Wahlreform in Europa und Amerika, übersetzt von U. Wille. Zürich. 8vo.

Neumann, F. X.—Die Civilisation und der wirthschaftliche Fortschritt. (Officieller Ausstellungs-Bericht herausgegeben durch das k. k. österreichische central Comité. Lieferung 16.) Wien. 8vo.

Nougaret, J.—De l'Enseignement populaire en Suède. Paris. 8vo.

Oettingen, A. v.—Die Moralstatistik und die christliche Sittenlehre. Versuch einer Socialethik auf empirischer Grundlage. Erlangen. 8vo.

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Plan for the Suppression of the Predatory Classes. Ward & Lock.

Parker, J.—The Three Powers of Government. New York.

Pelletan, E.—La Femme au XIXe Siècle. Paris. 8vo.

Penny, V.—Men and Women, Work and Wages. Philadelphia. 12mo.

Pfeiffer, E.—Die Consumvereine, ihr Wesen und Wirken. 2 Aufl. Stuttgart. 8vo.

Politisches Handbuch. Staats-Lexikon für das deutsche Volk. 2 Hft. Leipzig: Brockhaus. 8vo.

Pomeroy, Prof. J. N.—Education in Politics. New York.

Pradier-Fodéré, P. — Principes Généraux de Droit, de Politique et de Législation. Paris. 8vo.

Price, Bonamy.—Principles of Currency. Six Lectures delivered at Oxford. With a Letter from M. Michel Chevalier on the History of the Treaty of Commerce with France. Parker. 8vo.

Quetelet, A.—Physique Sociale; ou, Essai sur le Développement des Facultés de l'Homme. Tome I. Bruxelles. Roy. 8vo.

Renan, E.—La Part de la Famille et de l'État dans l'Éducation. Paris. 8vo.

Riehl, W. H.—Wanderbuch als zweiter Theil zu "Land und Leute." (Die Naturgeschichte des Volkes als Grundlage einer deutschen Socialpolitik. Band IV.) Stuttgart. 8vo.

Rittinghausen, M.—Social-demokratische Abhandlungen. 2 Heft. Ueber die Nothwendigkeit der direkten Gesetzgebung durch das Volk. Köln. 8vo.

Robin, E.—Les Prisons de France et le Patronage des Prisonniers libérés. Paris. 8vo.

Rondelet, A.—Le Travail et ses Lois. Paris. 24mo.

Rönne, L. v.—Das Staatsrecht der preussischen Monarchie. 3 Aufl. Lieferung I. Leipzig. Gr. 8vo.

Rossbach, J. J.—Geschichte der Gesellschaft. Theil II. Würzburg. 8vo.

Runge, W.—Ueber die Betheiligung der Arbeiter am Reingewinn industrieller Unternehmungen. Breslau. 8vo.

Sammlung gemeinverständlicher socio-wissenschaftlicher Vorträge, herausgegeben von Rud. Virchow und Fr. v. Holtzendorff. Berlin. Gr. 8vo.

Samter, A.—Die Reform des Geldwesens. Berlin. 8vo.

Sander, F.—Die englische Sanitäts-Gesetzgebung. Elberfeld: Lucas. 8vo.

Sarwey—Zur Genossenschaftsgesetzgebung mit besonderer Bezugnahme auf die Schrift von Schulze-Delitzsch, die Gesetzgebung über die privatrechtliche Stellung der Erwerbs- und Wirthschaftsgenossenschaften. Stuttgart: Lindemann. 8vo.

Saurac, Xavier—Un Système d'Organisation sociale. 3e Édition. Toulouse: imp. Caillot et Baylac. 12mo.

Sauvage, R.—Garanties Sociales. Paris. 8vo.

Sax, E.—Die Wohnungszustände der arbeitenden Classen und ihre Reform. Wien. 8vo.

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PUBLIC PARKS AND THE ENLARGEMENT OF TOWNS.

Read before the American Social Science Association, at the Lowell Institute, Boston, February 25, 1870. — By Fred. L. Olmsted.

The last "Overland Monthly" tells us that in California "only an inferior class of people can be induced to live out of towns. There is something in the country which repels men. In the city alone can they nourish the juices of life."

This of newly built and but half-equipped cities, where the people are never quite free from dread of earthquakes, and of a country in which the productions of agriculture and horticulture are more varied, and the rewards of rural enterprise larger, than in any other under civilized government! With a hundred million acres of arable and grazing land, with thousands of outcropping gold veins, with the finest forests in the world, fully half the white people live in towns, a quarter of all in one town, and this quarter pays more than half the taxes of all. "Over the mountains the miners," says Mr. Bowles, "talk of going to San Francisco as to Paradise," and the rural members of the Legislature declare that "San Francisco sucks the life out of the country."

At the same time all our great interior towns are reputed to be growing rapidly; their newspapers complain that wheat and gold fall much faster than house-rents, and especially that builders fail to meet the demand for such dwellings as are mostly sought by new-comers, who are mainly men of small means and young families, anxious to make a lodgment in the city on any terms which will give them a chance of earning a right to remain. In Chicago alone, it is said, that there are twenty thousand people seeking employment.

To this I can add, from personal observation, that if we stand, any day before noon, at the railway stations of these cities, we may notice women and girls arriving by the score, who, it will be apparent, have just run in to do a little shopping, intending to return by supper time to farms perhaps a hundred miles away.

It used to be a matter of pride with the better sort of our country people that they could raise on their own land or manufacture within their own households almost everything needed for domestic consumption. But if now you leave the rail, at whatever remote station, the very advertisements on its walls will manifest how greatly this is changed. Push out over the prairie and make your way to the house of any long-settled and prosperous farmer, and the intimacy of his family with the town will constantly appear, in dress, furniture, viands, in all the conversation. If there is a piano, they will be expecting a man from town to tune it. If the baby has outgrown its shoes, the measure is to be sent to town. If a tooth is troublesome, an appointment is to be arranged by telegraph with the dentist. The railway time-table hangs with the almanac. The housewife complains of her servants. There is no difficulty in getting them from the intelligence offices in town, such as they are; but only the poorest, who cannot find employment in the city, will come to the country, and these as soon as they have got a few dollars ahead, are crazy to get back to town. It is much the same with the men, the farmer will add; he has to run up in the morning and get some one to take "Wolf's" place. You will find, too, that one of his sons is in a lawyer's office, another at a commercial college, and his oldest daughter at an "institute," all in town. I know several girls who travel eighty miles a day to attend school in Chicago.

If under these circumstances the occupation of the country school-master, shoemaker, and doctor, the country store-keeper, dressmaker and lawyer, is not actually gone, it must be that the business they have to do is much less relatively to the population about them than it used to be; not less in amount only, but less in importance. An inferior class of men will meet the requirements.

And how are things going here in Massachusetts? A correspondent of the "Springfield Republican" gave the other day an account of a visit lately made to two or three old agricultural neighborhoods, such as fifty years ago were the glory of New England. When he last knew them, their society was spoken of with pride, and the influence of not a few of their citizens was felt throughout the State, and indeed far beyond it. But as he found them now, they might almost be sung by Goldsmith. The meeting-house closed, the church dilapidated; the famous old taverns, stores, shops, mills, and offices dropping to pieces and vacant, or

perhaps with a mere corner occupied by day laborers; but a third as many children as formerly to be seen in the school-houses, and of these less than half of American-born parents.

Walking through such a district last summer, my eyes were gladdened by a single house with exceptional signs of thrift in fresh paint, roofs, and fences, and newly planted door-yard trees; but happening as I passed to speak to the owner, in the second sentence of our conversation he told me that he had been slicking his place up in hopes that some city gentleman would take a fancy to it for a country seat. He was getting old, had worked hard, and felt as if the time had fully come when he was entitled to take some enjoyment of what remained to him of life by retiring to the town. Nearly all his old neighbors were gone; his children had left years ago. His town-bred granddaughters were playing croquet in the front yard.

You know how it is here in Boston. Let us go on to the Old World. We read in our youth that among no other people were rural tastes so strong, and rural habits so fixed, as with those of Old England, and there is surely no other country where the rural life of the more fortunate classes compares so attractively with their town life. Yet in the "Transactions of the British Social Science Association," we find one debater asserting that there are now very few more persons living in the rural districts of England and Wales than there were fifty years ago; another referring to "the still increasing growth of our overgrown towns and the stationary or rather retrograding numbers of our rural population;" [1] while a third remarks that the social and educational advantages of the towns are drawing to them a large proportion of "the wealthy and independent," as well as all of the working classes not required for field labor.[2]

When I was last in England, the change that had occurred even in ten years could be perceived by a rapid traveller. Not only had the country gentleman and especially the country gentlewoman of Irving departed wholly with all their following, but the very embers had been swept away of that manner of life upon which, so little while ago, everything in England seemed to be dependent. In all the country I found a smack of the suburbs — hampers and packages from metropolitan tradesmen, and purveyors arriving by every train, and a constant communication kept up with town by penny-post and telegraph.

In the early part of the century, the continued growth of London

[1] *Transactions*, 1864. [2] *Transactions*, 1861.

was talked of as something marvelous and fearful; but where ten houses were then required to accommodate new residents, there are now a hundred. The average rate at which population increases in the six principal towns is twice as great as in the country at large, including the hundreds of other flourishing towns. So also Glasgow has been growing six times faster than all Scotland; and Dublin has held its own, while Ireland as a whole has been losing ground.

Crossing to the Continent, we find Paris absorbing half of all the increase of France in population; Berlin growing twice as fast as all Prussia; Hamburg, Stettin, Stuttgart, Brussels, and a score or two of other towns, all building out into the country at a rate never before known, while many agricultural districts are actually losing population. In Russia special provision is made in the laws to regulate the gradual compensation of the nobles for their losses by the emancipation of the serfs, to prevent the depopulation of certain parts of the country, which was in danger of occurring from the eagerness of the peasantry to move into the large towns.[1]

Going still further to the eastward, we may find a people to whom the movement has not thus far been communicated; but it is only where obscurity affords the best hope of safety from oppression, where men number their women with their horses, and where labor-saving inventions are as inventions of the enemy.

There can be no doubt then, that, in all our modern civilization, as in that of the ancients, there is a strong drift townward. But some seem to regard the class of symptoms I have referred to as those of a sort of moral epidemic, the crisis and reaction of which they constantly expect to see. They even detect already a growing disgust with the town and signs of a back-set towards rural simplicity. To avoid prolonged discussion of the question thus suggested I will refer but briefly to the intimate connection which is evident between the growth of towns and the dying out of slavery and feudal customs, of priestcraft and government by divine right, the multiplication of books, newspapers, schools, and other means of popular education and the adoption of improved methods of communication, transportation, and of various labor-saving inventions. No nation has yet begun to give up schools or newspapers, railroads or telegraphs, to restore feudal rights or advance rates of postage. King-craft and priestcraft are nowhere gaining any solid ground. On the contrary, considered as elements of human progress, the more apparent forces under which men have

[1] *Nation*, vol. x. p. 161.

thus far been led to gather together in towns are yet growing; never more rapidly than at this moment. It would seem then more rational to prepare for a continued rising of the townward flood than to count upon its subsidence. Examining our own country more particularly, it is to be considered that we have been giving away our public lands under a square form of division, as if for the purpose of preventing the closer agricultural settlement which long and narrow farms would have favored, and that we have used our mineral deposits as premiums for the encouragement of wandering and of forms of enterprise, individual, desultory and sequestered in character, in distinction from those which are organized, systematized and public. This policy has had its day; the choicest lands have been taken up; the most prominent and easiest worked metallic veins have been seized, the richest placers are abandoned to Chinamen, and the only reaction that we can reasonably anticipate is one from, not toward, dispersion.

The same policy, indeed, has had the effect of giving us, for a time, great command of ready money and easy credit, and we have thus been induced to spend an immense sum — say two thousand millions — in providing ourselves with the fixtures and machinery of our railroad system. This system, while encouraging the greater dispersion of our food-producers, has tended most of all to render them, as we have seen, independent of all the old neighborhood agencies of demand and supply, manufacture and exchange, and to educate them and their children in familiarity with and dependence on the conveniences and habits of towns-people.

To touch upon another line of argument, we all recognize that the tastes and dispositions of women are more and more potent in shaping the course of civilized progress, and we may see that women are even more susceptible to this townward drift than men. Oftentimes the husband and father gives up his country occupations, taking others less attractive to him in town, out of consideration for his wife and daughters. Not long since I conveyed to a very sensible and provident man what I thought to be an offer of great preferment. I was surprised that he hesitated to accept it, until the question was referred to his wife, a bright, tidy American-born woman, who promptly said: "If I were offered a deed of the best farm that I ever saw, on condition of going back to the country to live, I would not take it. I would rather face starvation in town." She had been brought up and lived the greater part of her life in one of the most convenient and agreeable farming countries in the United States.

Is it astonishing? Compare advantages in respect simply to

schools, libraries, music, and the fine arts. People of the greatest wealth can hardly command as much of these in the country as the poorest work-girl is offered here in Boston at the mere cost of a walk for a short distance over a good, firm, clean pathway, lighted at night and made interesting to her by shop fronts and the variety of people passing.

It is true the poorer work-girls make little use of these special advantages, but this simply because they are not yet educated up to them. When, however, they come from the country to town, are they not moving in the way of this education? In all probability, as is indicated by the report (in the "New York Tribune") of a recent skillful examination of the condition and habits of the poor sewing women of that city, a frantic desire to escape from the dull lives which they have seen before them in the country, a craving for recreation, especially for more companionship in yielding to playful girlish impulses, innocent in themselves, drives more young women to the town than anything else. Dr. Holmes may exaggerate the clumsiness and dreariness of New England village social parties; but go further back into the country among the outlying farms, and if you have ever had part in the working up of some of the rare occasions in which what stands for festivity is attempted, you will hardly think that the ardent desire of a young woman to escape to the town is wholly unreasonable.

The civilized woman is above all things a tidy woman. She enjoys being surrounded by bright and gay things perhaps not less than the savage, but she shrinks from draggling, smirching, fouling things and "things out of keeping" more. By the keenness with which she avoids subjecting herself to annoyances of this class, indeed, we may judge the degree in which a woman has advanced in civilization. Think what a country road and roadside, and what the back yard of a farm-house, commonly is, in winter and spring-time; and what far-away farmers' gardens are in haying time, or most of them at any time. Think, again, how hard it is when you city people go into the country for a few weeks in summer, to keep your things in order, to get a thousand little things done which you regard as trifles when at home, how far you have to go, and with how much uncertainty, how much unaccustomed management you have to exercise. For the perfection and delicacy — the cleanness — with which any human want is provided for depends on the concentration of human ingenuity and skill upon that particular want. The greater the division of labor at any point, the greater the perfection with which all wants may

be satisfied. Everywhere in the country the number and variety of workmen, not agricultural laborers, proportionately to the population, is lessening as the facility for reaching workmen in town is increasing. In one year we find fifty-four new divisions of trade added to the "London Directory."

Think of all these things, and you will possibly find yourself growing a little impatient of the common cant which assumes that the strong tendency of women to town life, even though it involves great privations and dangers, is a purely senseless, giddy, vain, frivolous, and degrading one.

The consideration which most influences this tendency of women in families, however, seems to be the amount of time and labor, and wear and tear of nerves and mind, which is saved to them by the organization of labor in those forms, more especially, by which the menial service of households is simplified and reduced. Consider, for instance, what is done (that in the country is not done at all or is done by each household for itself, and, if efficiently, with a wearing, constant effort of superintendence) by the butcher, baker, fishmonger, grocer, by the provision venders of all sorts, by the ice-man, dust-man, scavenger, by the postman, carrier, expressmen, and messengers, all serving you at your house when required; by the sewers, gutters, pavements, crossings, sidewalks, public conveyances, and gas and water works.

But here again there is every reason to suppose that what we see is but a foretaste of what is yet to come. Take the difference of demand upon invention in respect to cheap conveyance for example. We began experimentally with street railways twenty years ago. At present, in New York, one pair of horses serves to convey one hundred people, on an average, every day at a rate of fare about one fiftieth of the old hackney-coach rates, and the total number of fares collected annually is equal to that of the population of the United States. And yet thousands walk a number of miles every day because they cannot be seated in the cars. It is impossible to fix a limit to the amount of travel which really ample, convenient, and still cheap means of transportation for short distances would develop. Certain improvements have caused the whole number of people seeking conveyances in London to be doubled in the last five years, and yet the supply keeps nowhere near the demand.

See how rapidly we are really gaining, and what we have to expect. Two recent inventions give us the means of reducing by a third, under favorable circumstances, the cost of good McAdam

roads. There have been sixteen patents issued from one office for other new forms of perfectly smooth and nearly noiseless street pavement, some of which, after two or three years' trial, promise so well as to render it certain that some improvement will soon come by which more than one of the present special annoyances of town life will be abated. An improvement in our sewer system seems near at hand also, which will add considerably to the comparative advantages of a residence in towns, and especially the more open town suburbs.

Experiments indicate that it is feasible to send heated air through a town in pipes like water, and that it may be drawn upon, and the heat which is taken measured and paid for according to quantity required. Thus may come a great saving of fuel and trouble in a very difficult department of domestic economy. No one will think of applying such a system to farm-houses.

Again, it is plain that we have scarcely begun to turn to account the advantages offered to towns-people in the electric telegraph; we really have not made a beginning with those offered in the pneumatic tube, though their substantial character has been demonstrated. By the use of these two instruments, a tradesman ten miles away on the other side of a town may be communicated with, and goods obtained from him by a housekeeper, as quickly and with as little personal inconvenience as now if he were in the next block. A single tube station for five hundred families, acoustic pipes for the transmission of orders to it from each house, with a carriers' service for local distribution of packages, is all that is needed for this purpose.

As to the economy which comes by systematizing and concentrating, by the application of a large apparatus, of processes which are otherwise conducted in a desultory way, wasteful of human strength, as by public laundries, bakeries, and kitchens, we are yet, in America, even in our larger cities, far behind many of the smaller towns of the Old World.

While in all these directions enterprise and the progress of invention are quite sure to add rapidly to the economy and convenience of town life, and thus increase its comparative attractions, in other directions every step tends to reduce the man-power required on the farms for the production of a given amount of the raw material of food. Such is the effect, for instance, of every improvement of apparatus or process in ploughing, mowing, reaping, curing, thrashing, and marketing.

Another tendency arising from the improvement of agricultural

apparatus, which will be much accelerated when steam shall have been as successfully applied to tillage as already to harvesting and marketing operations, is that to the enlargement of fields and of farms. From this will follow the greater isolation of rural homesteads; for with our long-fronted farms, it will be long before we can hope to have country roads on which rapid engine-transit will be practicable, though we may be close upon it wherever firm and smooth roads can be afforded.[1]

It should be observed that possession of all the various advantages of the town to which we have referred, while it very certainly cannot be acquired by people living in houses a quarter or a half a mile apart, does not, on the other hand, by any means involve an unhealthy density of population. Probably the advantages of civilization can be found illustrated and demonstrated under no other circumstances so completely as in some suburban neighborhoods where each family abode stands fifty or a hundred feet or more apart from all others, and at some distance from the public road. And it must be remembered, also, that man's enjoyment of rural beauty has clearly increased rather than diminished with his advance in civilization. There is no reason, except in the loss of time, the inconvenience, discomfort, and expense of our present arrangements for short travel, why suburban advantages should not be almost indefinitely extended. Let us have a cheap and enjoyable method of conveyance, and a building law like that of old Rome, and they surely will be.

As railroads are improved, all the important stations will become centres or sub-centres of towns, and all the minor stations suburbs. For most ordinary every-day purposes, especially housekeepers' purposes, these will need no very large population before they can obtain urban advantages. I have seen a settlement, the resident population of which was under three hundred, in which there was a public laundry, bath-house, barber's shop, billiard-room, beer-garden, and bakery. Fresh rolls and fresh milk were supplied to families before breakfast time every morning; fair fruit and succulent vegetables were delivered at house doors not half an hour after picking; and newspapers and magazines were distributed by a carrier. I have seen a town of not more than twelve hundred inhabitants, the streets and the yards, alleys, and places of which were swept every day as regularly as the house floors, and all dust removed by a public dust-man.

[1] *Slow freighting* over earth roads is practicable; 500 locomotives are now in regular use on common roads.

The construction of good roads and walks, the laying of sewer water, and gas pipes, and the supplying of sufficiently cheap, rapid, and comfortable conveyances to town centres, is all that is necessary to give any farming land in a healthy and attractive situation the value of town lots. And whoever has observed in the French agricultural colonies how much more readily and cheaply railroads, telegraph, gas, water, sewer, and nearly all other advantages of towns may be made available to the whole population than under our present helter-skelter methods of settlement, will not believe that even the occupation of a farm laborer must necessarily and finally exclude his family from a very large share of urban conveniences.

But this opens a subject of speculation, which I am not now free to pursue. It is hardly a matter of speculation, I am disposed to think, but almost of demonstration, that the larger a town becomes because simply of its advantages for commercial purposes, the greater will be the convenience available to those who live in and near it for coöperation, as well with reference to the accumulation of wealth in the higher forms, — as in seats of learning, of science, and of art, — as with reference to merely domestic economy and the emancipation of both men and women from petty, confining, and narrowing cares.

It also appears to be nearly certain that the recent rapid enlargement of towns and withdrawal of people from rural conditions of living is the result mainly of circumstances of a permanent character.

We have reason to believe, then, that towns which of late have been increasing rapidly on account of their commercial advantages, are likely to be still more attractive to population in the future; that there will in consequence soon be larger towns than any the world has yet known, and that the further progress of civilization is to depend mainly upon the influences by which men's minds and characters will be affected while living in large towns.

Now, knowing that the average length of the life of mankind in towns has been much less than in the country, and that the average amount of disease and misery and of vice and crime has been much greater in towns, this would be a very dark prospect for civilization, if it were not that modern Science has beyond all question determined many of the causes of the special evils by which men are afflicted in towns, and placed means in our hands for guarding against them. It has shown, for example, that under ordinary circumstances, in the interior parts of large and closely built towns, a given quantity of air contains considerably less of the elements

which we require to receive through the lungs than the air of the country or even of the outer and more open parts of a town, and that instead of them it carries into the lungs highly corrupt and irritating matters, the action of which tends strongly to vitiate all our sources of vigor — how strongly may perhaps be indicated in the shortest way by the statement that even metallic plates and statues corrode and wear away under the atmospheric influences which prevail in the midst of large towns, more rapidly than in the country.

The irritation and waste of the physical powers which result from the same cause, doubtless indirectly affect and very seriously affect the mind and the moral strength; but there is a general impression that a class of men are bred in towns whose peculiarities are not perhaps adequately accounted for in this way. We may understand these better if we consider that whenever we walk through the denser part of a town, to merely avoid collision with those we meet and pass upon the sidewalks, we have constantly to watch, to foresee, and to guard against their movements. This involves a consideration of their intentions, a calculation of their strength and weakness, which is not so much for their benefit as our own. Our minds are thus brought into close dealings with other minds without any friendly flowing toward them, but rather a drawing from them. Much of the intercourse between men when engaged in the pursuits of commerce has the same tendency — a tendency to regard others in a hard if not always hardening way. Each detail of observation and of the process of thought required in this kind of intercourse or contact of minds is so slight and so common in the experience of towns-people that they are seldom conscious of it. It certainly involves some expenditure nevertheless. People from the country are even conscious of the effect on their nerves and minds of the street contact — often complaining that they feel confused by it; and if we had no relief from it at all during our waking hours, we should all be conscious of suffering from it. It is upon our opportunities of relief from it, therefore, that not only our comfort in town life, but our ability to maintain a temperate, good-natured, and healthy state of mind, depends. This is one of many ways in which it happens that men who have been brought up, as the saying is, in the streets, who have been most directly and completely affected by town influences, so generally show, along with a remarkable quickness of apprehension, a peculiarly hard sort of selfishness. Every day of their lives they have seen thousands of their fellow-men, have met them face to face, have brushed against them, and yet have had no experience of anything in common with them.

It has happened several times within the last century, when old artificial obstructions to the spreading out of a city have been removed, and especially when there has been a demolition of and rebuilding on a new ground plan of some part which had previously been noted for the frequency of certain crimes, the prevalence of certain diseases, and the shortness of life among its inhabitants, that a marked improvement in all these respects has immediately followed, and has been maintained not alone in the dark parts, but in the city as a whole.

But although it has been demonstrated by such experiments that we have it in our power to greatly lessen and counteract the two classes of evils we have had under consideration, it must be remembered that these means are made use of only with great difficulty — how great, one or two illustrations from experience will enable us perhaps better to understand.

When the business quarter of New York was burnt over, thirty years ago, there was a rare opportunity for laying out a district expressly with a view to facilitate commerce. The old plan had been arrived at in a desultory way; and so far as it had been the result of design, it had been with reference more especially to the residence of a semi-rural population. This had long since passed away; its inconvenience for commercial purposes had been experienced for many years; no one supposed from the relation of the ground to the adjacent navigable waters that it would ever be required for other than commercial purposes. Yet the difficulties of equalizing benefits and damages among the various owners of the land prevented any considerable change of the old street lines. Every working day thousands of dollars are subtracted from the profits of business, by the disadvantages thus reëstablished. The annual loss amounts to millions.

Men of barbarous habits laid out a part of London in a way which a thousand years later was found to be a cause of an immeasurable waste of life, strength, and property. There had been much talk, but no effective action, looking toward improvement, when the great fire came, and left every building a heap of ashes. Immediately upon this, while the fire was still burning, a great man, Sir Christopher Wren, prepared a plan for avoiding the old evils. This plan, a simple, excellent, and economical one, he took to the king, who at once approved it, took a strong interest in it, and used all his royal power to have it carried out. It was hailed with satisfaction by all wise and good men, and yet so difficult was it to overcome the difficulties entailed by the original rural laying out of the

ground, that the attempt was finally abandoned, and the new city was built with immaterial modifications under the old barbarous plan; and so it remains with only slight improvement, and that purchased at enormous cost, to this day.

Remedy for a bad plan, once built upon, being thus impracticable, now that we understand the matter we are surely bound, wherever it is by any means in our power, to prevent mistakes in the construction of towns. Strange to say, however, here in the New World, where great towns by the hundred are springing into existence, no care at all is taken to avoid bad plans. The most brutal Pagans to whom we have sent our missionaries have never shown greater indifference to the sufferings of others than is exhibited in the plans of some of our most promising cities, for which men now living in them are responsible.

Not long since I was asked by the mayor of one of these to go before its common council and explain the advantages of certain suggested changes, including especially the widening of two roads leading out of town and as yet but partially opened and not at all built upon. After I had done so, two of the aldermen in succession came to me, and each privately said in effect: "It is quite plain that the proposition is a good one, and it ought to be adopted; the city would undoubtedly gain by it; but the people of the ward I represent have less interest in it than some others: they do not look far ahead, and they are jealous of those who would be more directly benefited than themselves; consequently I don't think that they would like it if I voted for it, and I shall not, but I hope it will be carried."

They were unwilling that even a stranger should have so poor an opinion of their own intelligence as to suppose that they did not see the advantage of the change proposed; but it was not even suggested to their minds that there might be something shameful in repudiating their obligations to serve, according to the best of their judgment, the general and permanent interests committed to them as legislators of the city.

It is evident that if we go on in this way, the progress of civilized mankind in health, virtue, and happiness will be seriously endangered.

It is practically certain that the Boston of to-day is the mere nucleus of the Boston that is to be. It is practically certain that it is to extend over many miles of country now thoroughly rural in character, in parts of which farmers are now laying out roads with a view to shortening the teaming distance between their wood-lots

and a railway station, being governed in their courses by old property lines, which were first run simply with reference to the equitable division of heritages, and in other parts of which, perhaps, some wild speculators are having streets staked off from plans which they have formed with a rule and pencil in a broker's office, with a view chiefly to the impressions they would make when seen by other speculators on a lithographed map. And by this manner of planning, unless views of duty or of interest prevail that are not yet common, if Boston continues to grow at its present rate even for but a few generations longer, and then simply holds its own until it shall be as old as the Boston in Lincolnshire now is, more men, women, and children are to be seriously affected in health and morals than are now living on this Continent.

Is this a small matter — a mere matter of taste; a sentimental speculation?

It must be within the observation of most of us that where, in the city, wheel-ways originally twenty feet wide were with great difficulty and cost enlarged to thirty, the present width is already less nearly adequate to the present business than the former was to the former business; obstructions are more frequent, movements are slower and oftener arrested, and the liability to collision is greater. The same is true of sidewalks. Trees thus have been cut down, porches, bow-windows, and other encroachments removed, but every year the walk is less sufficient for the comfortable passing of those who wish to use it.

It is certain that as the distance from the interior to the circumference of towns shall increase with the enlargement of their population, the less sufficient relatively to the service to be performed will be any given space between buildings.

In like manner every evil to which men are specially liable when living in towns, is likely to be aggravated in the future, unless means are devised and adapted in advance to prevent it.

Let us proceed, then, to the question of means, and with a seriousness in some degree befitting a question, upon our dealing with which we know the misery or happiness of many millions of our fellow-beings will depend.

We will for the present set before our minds the two sources of wear and corruption which we have seen to be remediable and therefore preventible. We may admit that commerce requires that in some parts of a town there shall be an arrangement of buildings, and a character of streets and of traffic in them which will establish conditions of corruption and of irritation, physical and

mental. But commerce does not require the same conditions to be maintained in all parts of a town.

Air is disinfected by sunlight and foliage. Foliage also acts mechanically to purify the air by screening it. Opportunity and inducement to escape at frequent intervals from the confined and vitiated air of the commercial quarter, and to supply the lungs with air screened and purified by trees, and recently acted upon by sunlight, together with opportunity and inducement to escape from conditions requiring vigilance, wariness, and activity toward other men, — if these could be supplied economically, our problem would be solved.

In the old days of walled towns all tradesmen lived under the roof of their shops, and their children and apprentices and servants sat together with them in the evening about the kitchen fire. But now that the dwelling is built by itself and there is greater room, the inmates have a parlor to spend their evenings in ; they spread carpets on the floor to gain in quiet, and hang drapery in their windows and papers on their walls to gain in seclusion and beauty. Now that our towns are built without walls, and we can have all the room that we like, is there any good reason why we should not make some similar difference between parts which are likely to be dwelt in, and those which will be required exclusively for commerce ?

Would trees, for seclusion and shade and beauty, be out of place, for instance, by the side of certain of our streets ? It will, perhaps, appear to you that it is hardly necessary to ask such a question, as throughout the United States trees are commonly planted at the sides of streets. Unfortunately they are seldom so planted as to have fairly settled the question of the desirableness of systematically maintaining trees under these circumstances. In the first place, the streets are planned, wherever they are, essentially alike. Trees are planted in the space assigned for sidewalks, where at first, while they are saplings, and the vicinity is rural or suburban, they are not much in the way, but where, as they grow larger, and the vicinity becomes urban, they take up more and more space, while space is more and more required for passage. That is not all. Thousands and tens of thousands are planted every year in a manner and under conditions as nearly certain as possible either to kill them outright, or to so lessen their vitality as to prevent their natural and beautiful development, and to cause premature decrepitude. Often, too, as their lower limbs are found inconvenient, no space having been provided for trees in laying out the street, they

are deformed by butcherly amputations. If by rare good fortune they are suffered to become beautiful, they still stand subject to be condemned to death at any time, as obstructions in the highway.[1]

What I would ask is, whether we might not with economy make special provision in some of our streets — in a twentieth or a fiftieth part, if you please, of all — for trees to remain as a permanent furniture of the city? I mean, to make a place for them in which they would have room to grow naturally and gracefully. Even if the distance between the houses should have to be made half as much again as it is required to be in our commercial streets, could not the space be afforded? Out of town space is not costly when measures to secure it are taken early. The assessments for benefit where such streets were provided for, would, in nearly all cases, defray the cost of the land required. The strips of ground reserved for the trees, six, twelve, twenty feet wide, would cost nothing for paving or flagging.

The change both of scene and of air which would be obtained by people engaged for the most part in the necessarily confined interior commercial parts of the town, on passing into a street of this character after the trees had become stately and graceful, would be worth a good deal. If such streets were made still broader in some parts, with spacious malls, the advantage would be increased. If each of them were given the proper capacity, and laid out with laterals and connections in suitable directions to serve as a convenient trunk-line of communication between two large districts of the town or the business centre and the suburbs, a very great number of people might thus be placed every day under influences counteracting those with which we desire to contend.

These, however, would be merely very simple improvements upon arrangements which are in common use in every considerable town. Their advantages would be incidental to the general uses of streets as they are. But people are willing very often to seek

[1] On the border of the first street laid out in the oldest town in New England, there yet stands what has long been known as "the Town Tree," its trunk having served for generations as a publication post for official notices. "The selectmen," having last year removed the lower branches of all the younger roadside trees of the town, and thereby its chief beauty, have this year deliberately resolved that they would have this tree cut down, for no other reason, so far as appears in their official record, than that if two persons came carelessly together on the roadway side of it, one of them might chance to put his foot in the adjoining shallow street-gutter. It might cost ten dollars to deepen and bridge this gutter substantially. The call to arms for the Old French War, for the War of the Revolution, the war for the freedom of the seas, the Mexican War, and the War of the Rebellion, was first made in this town under the shade of this tree, which is an American elm, and, notwithstanding its great age, is perfectly healthy and almost as beautiful as it is venerable.

recreation, as well as receive it by the way. Provisions may indeed be made expressly for public recreations, with certainty that if convenient they will be resorted to.

We come then to the question: what accommodations for recreation can we provide which shall be so agreeable and so accessible as to be efficiently attractive to the great body of citizens, and which, while giving decided gratification, shall also cause those who resort to them for pleasure to subject themselves, for the time being, to conditions strongly counteractive to the special enervating conditions of the town?

In the study of this question all forms of recreation may, in the first place, be conveniently arranged under two general heads. One will include all of which the predominating influence is to stimulate exertion of any part or parts needing it; the other, all which cause us to receive pleasure without conscious exertion. Games chiefly of mental skill, as chess, or athletic sports, as base-ball, are examples of means of recreation of the first class, which may be termed that of *exertive* recreation; music and the fine arts generally of the second or *receptive* division.

Considering the first by itself, much consideration will be needed in determining what classes of exercises may be advantageously provided for. In the Bois de Boulogne there is a race-course; in the Bois de Vincennes a ground for artillery target-practice. Military parades are held in Hyde Park. A few cricket clubs are accommodated in most of the London parks, and swimming is permitted in the lakes at certain hours. In the New York Park, on the other hand, none of these exercises are provided for or permitted, except that the boys of the public schoools are given the use on holidays of certain large spaces for ball playing. It is considered that the advantage to individuals which would be gained in providing for them would not compensate for the general inconvenience and expense they would cause.

I do not propose to discuss this part of the subject at present, as it is only necessary to my immediate purpose to point out that if recreations requiring large spaces to be given up to the use of a comparatively small number, are not considered essential, numerous small grounds so distributed through a large town that some one of them could be easily reached by a short walk from every house, would be more desirable than a single area of great extent, however rich in landscape attractions it might be. Especially would this be the case if the numerous local grounds were connected and supplemented by a series of trunk-roads or boulevards such as has already been suggested.

Proceeding to the consideration of receptive recreations, it is necessary to ask you to adopt and bear in mind a further subdivision, under two heads, according to the degree in which the average enjoyment is greater when a large congregation assembles for a purpose of receptive recreation, or when the number coming together is small and the circumstances are favorable to the exercise of personal friendliness.

The first I shall term *gregarious;* the second, *neighborly.* Remembering that the immediate matter in hand is a study of fitting accommodations, you will, I trust, see the practical necessity of this classification.

Purely gregarious recreation seems to be generally looked upon in New England society as childish and savage, because, I suppose, there is so little of what we call intellectual gratification in it. We are inclined to engage in it indirectly, furtively, and with complication. Yet there are certain forms of recreation, a large share of the attraction of which must, I think, lie in the gratification of the gregarious inclination, and which, with those who can afford to indulge in them, are so popular as to establish the importance of the requirement.

If I ask myself where I have experienced the most complete gratification of this instinct in public and out of doors, among trees, I find that it has been in the promenade of the Champs Elysées. As closely following it I should name other promenades of Europe, and our own upon the New York parks. I have studiously watched the latter for several years. I have several times seen fifty thousand people participating in them; and the more I have seen of them, the more highly have I been led to estimate their value as means of counteracting the evils of town life.

Consider that the New York Park and the Brooklyn Park are the only places in those associated cities where, in this eighteen hundred and seventieth year after Christ, you will find a body of Christians coming together, and with an evident glee in the prospect of coming together, all classes largely represented, with a common purpose, not at all intellectual, competitive with none, disposing to jealousy and spiritual or intellectual pride toward none, each individual adding by his mere presence to the pleasure of all others, all helping to the greater happiness of each. You may thus often see vast numbers of persons brought closely together, poor and rich, young and old, Jew and Gentile. I have seen a hundred thousand thus congregated, and I assure you that though there have been not a few that seemed a little dazed, as if they did

not quite understand it, and were, perhaps, a little ashamed of it, I have looked studiously but vainly among them for a single face completely unsympathetic with the prevailing expression of good nature and light-heartedness.

Is it doubtful that it does men good to come together in this way in pure air and under the light of heaven, or that it must have an influence directly counteractive to that of the ordinary hard, hustling working hours of town life?

You will agree with me, I am sure, that it is not, and that opportunity, convenient, attractive opportunity, for such congregation, is a very good thing to provide for, in planning the extension of a town.

I referred especially to the Champs Elysées, because the promenade there is a very old custom, not a fashion of the day, and because I must needs admit that this most striking example is one in which no large area of ground — nothing like a park — has been appropriated for the purpose. I must acknowledge, also, that the alamedas of Spain and Portugal supply another and very interesting instance of the same fact. You will observe, however, that small local grounds, such as we have said might be the best for most exertive recreations, are not at all adapted to receptive recreations of the type described.

One thing more under this head. I have but little personal familiarity with Boston customs; but I have lived or sojourned in several other towns of New England, as well as of other parts of the country, and I have never been long in any locality, south or north, east or west, without observing a *custom* of gregarious out-of-door recreation in some miserably imperfect form, usually covered by a wretched pretext of a wholly different purpose, as perhaps, for instance, visiting a grave-yard. I am sure that it would be much better, less expensive, less harmful in all ways, more health-giving to body, mind, and soul, if it were admitted to be a distinct requirement of all human beings, and appropriately provided for.

I have next to see what opportunities are wanted to induce people to engage in what I have termed *neighborly* receptive recreations, under conditions which shall be highly counteractive to the prevailing bias to degeneration and demoralization in large towns. To make clearer what I mean, I need an illustration which I find in a familiar domestic gathering, where the prattle of the children mingles with the easy conversation of the more sedate, the bodily requirements satisfied with good cheer, fresh air, agreeable

light, moderate temperature, snug shelter, and furniture and decorations adapted to please the eye, without calling for profound admiration on the one hand, or tending to fatigue or disgust on the other. The circumstances are all favorable to a pleasurable wakefulness of the mind without stimulating exertion; and the close relation of family life, the association of children, of mothers, of lovers, or those who may be lovers, stimulate and keep alive the more tender sympathies, and give play to faculties such as may be dormant in business or on the promenade; while at the same time the cares of providing in detail for all the wants of the family, guidance, instruction, reproof, and the dutiful reception of guidance, instruction, and reproof, are, as matters of conscious exertion, as far as possible laid aside.

There is an instinctive inclination to this social, neighborly, unexertive form of recreation among all of us. In one way or another it is sure to be constantly operating upon those millions on millions of men and women who are to pass their lives within a few miles of where we now stand. To what extent it shall operate so as to develop health and virtue, will, on many occasions, be simply a question of opportunity and inducement. And this question is one for the determination of which for a thousand years we here to-day are largely responsible.

Think what the ordinary state of things to many is at this beginning of the town. The public is reading just now a little book in which some of your streets of which you are not proud are described.[1] Go into one of those red cross streets any fine evening next summer, and ask how it is with their residents? Oftentimes you will see half a dozen sitting together on the door-steps, or, all in a row, on the curb-stones, with their feet in the gutter, driven out of doors by the closeness within; mothers among them anxiously regarding their children who are dodging about at their play, among the noisy wheels on the pavement.

Again, consider how often you see young men in knots of perhaps half a dozen in lounging attitudes rudely obstructing the sidewalks, chiefly led in their little conversation by the suggestions given to their minds by what or whom they may see passing in the street, men, women, or children, whom they do not know, and for whom they have no respect or sympathy. There is nothing among them or about them which is adapted to bring into play a spark of admiration, of delicacy, manliness, or tenderness. You see them presently descend in search of physical comfort to a bril-

[1] *Sybaris*, by the Rev. E. E. Hale.

liantly lighted basement, where they find others of their sort, see, hear, smell, drink, and eat all manner of vile things.

Whether on the curb-stones or in the dram-shops, these young men are all under the influence of the same impulse which some satisfy about the tea-table with neighbors and wives and mothers and children, and all things clean and wholesome, softening and refining.

If the great city to arise here is to be laid out little by little, and chiefly to suit the views of land-owners, acting only individually, and thinking only of how what they do is to affect the value in the next week or the next year of the few lots that each may hold at the time, the opportunities of so obeying this inclination as at the same time to give the lungs a bath of pure sunny air, to give the mind a suggestion of rest from the devouring eagerness and intellectual strife of town life, will always be few to any, to many will amount to nothing.

But is it possible to make public provision for recreation of this class, essentially domestic and secluded as it is?

It is a question which can, of course, be conclusively answered only from experience. And from experience in some slight degree I shall answer it. There is one large American town, in which it may happen that a man of any class shall say to his wife, when he is going out in the morning: "My dear, when the children come home from school, put some bread and butter and salad in a basket, and go to the spring under the chestnut-tree where we found the Johnsons last week. I will join you there as soon as I can get away from the office. We will walk to the dairy-man's cottage and get some tea, and some fresh milk for the children, and take our supper by the brook-side;" and this shall be no joke, but the most refreshing earnest.

There will be room enough in the Brooklyn Park, when it is finished, for several thousand little family and neighborly parties to bivouac at frequent intervals through the summer, without discommoding one another, or interfering with any other purpose, to say nothing of those who can be drawn out to make a day of it, as many thousand were last year. And although the arrangements for the purpose were yet very incomplete, and but little ground was *at all* prepared for such use, besides these small parties, consisting of one or two families, there came also, in companies of from thirty to a hundred and fifty, somewhere near twenty thousand children with their parents, Sunday-school teachers, or other guides and friends, who spent the best part of a day under the trees and on

the turf, in recreations of which the predominating element was of this neighborly receptive class. Often they would bring a fiddle, flute, and harp, or other music. Tables, seats, shade, turf, swings, cool spring-water, and a pleasing rural prospect, stretching off half a mile or more each way, unbroken by a carriage road or the slightest evidence of the vicinity of the town, were supplied them without charge, and bread and milk and ice-cream at moderate fixed charges. In all my life I have never seen such joyous collections of people. I have, in fact, more than once observed tears of gratitude in the eyes of poor women, as they watched their children thus enjoying themselves.

The whole cost of such neighborly festivals, even when they include excursions by rail from the distant parts of the town, does not exceed for each person, on an average, a quarter of a dollar; and when the arrangements are complete, I see no reason why thousands should not come every day where hundreds come now to use them; and if so, who can measure the value, generation after generation, of such provisions for recreation to the overwrought, much-confined people of the great town that is to be?

For this purpose neither of the forms of ground we have heretofore considered are at all suitable. We want a ground to which people may easily go after their day's work is done, and where they may stroll for an hour, seeing, hearing, and feeling nothing of the bustle and jar of the streets, where they shall, in effect, find the city put far away from them. We want the greatest possible contrast with the streets and the shops and the rooms of the town which will be consistent with convenience and the preservation of good order and neatness. We want, especially, the greatest possible contrast with the restraining and confining conditions of the town, those conditions which compel us to walk circumspectly, watchfully, jealously, which compel us to look closely upon others without sympathy. Practically, what we most want is a simple, broad, open space of clean greensward, with sufficient play of surface and a sufficient number of trees about it to supply a variety of light and shade. This we want as a central feature. We want depth of wood enough about it not only for comfort in hot weather, but to completely shut out the city from our landscapes.

The word *park*, in town nomenclature, should, I think, be reserved for grounds of the character and purpose thus described.

Not only as being the most valuable of all possible forms of public places, but regarded simply as a large space which will seriously interrupt cross-town communication wherever it occurs,

the question of the site and bounds of the park requires to be determined with much more deliberation and art than is often secured for any problem of distant and extended municipal interests.

A Promenade may, with great advantage, be carried along the outer part of the surrounding groves of a park; and it will do no harm if here and there a broad opening among the trees discloses its open landscapes to those upon the promenade. But recollect that the object of the latter for the time being should be to see *congregated human life* under glorious and necessarily artificial conditions, and the natural landscape is not essential to them; though there is no more beautiful picture, and none can be more pleasing incidentally to the gregarious purpose, than that of beautiful meadows, over which clusters of level-armed sheltering trees cast broad shadows, and upon which are scattered dainty cows and flocks of black-faced sheep, while men, women, and children are seen sitting here and there, forming groups in the shade, or moving in and out among the woody points and bays.

It may be inferred from what I have said, that very rugged ground, abrupt eminences, and what is technically called picturesque in distinction from merely beautiful or simply pleasing scenery, is not the most desirable for a town park. Decidedly not in my opinion. The park should, as far as possible, complement the town. Openness is the one thing you cannot get in buildings. Picturesqueness you can get. Let your buildings be as picturesque as your artists can make them. This is the beauty of a town. Consequently, the beauty of the park should be the other. It should be the beauty of the fields, the meadow, the prairie, of the green pastures, and the still waters. What we want to gain is tranquillity and rest to the mind. Mountains suggest effort. But besides this objection there are others of what I may indicate as the housekeeping class. It is impossible to give the public range over a large extent of ground of a highly picturesque character, unless under very exceptional circumstances, and sufficiently guard against the occurrence of opportunities and temptations to shabbiness, disorder, indecorum, and indecency, that will be subversive of every good purpose the park should be designed to fulfill.

Nor can I think that *in the park proper*, what is called gardenesque beauty is to be courted; still less that highly artificial and exotic form of it, which, under the name of subtropical planting, the French have lately introduced, and in suitable positions with interesting and charming results, but in following which indiscreetly, the English are sacrificing the peculiar beauty of their

simple and useful parks of the old time. Both these may have places, and very important places, but they do not belong within a park, unless as side scenes and incidents. Twenty years ago Hyde Park had a most pleasing, open, free, and inviting expression, though certainly it was too rude, too much wanting in art; but now art is vexed with long black lines of repellant iron-work, and here and there behind it bouquets of hot-house plants, between which the public pass like hospital convalescents, who have been turned into the yard to walk about while their beds are making. We should undertake nothing in a park which involves the treating of the public as prisoners or wild beasts. A great object of all that is done in a park, of *all* the art of a park, is to influence the mind of men through their imagination, and the influence of iron hurdles can never be good.

We have, perhaps, sufficiently defined the ideal of a park for a large town. It will seldom happen that this ideal can be realized fully. The next thing is to select the situation in which it can be most nearly approached without great cost; and by cost I do not mean simply cost of land or of construction, but cost of inconvenience and cost of keeping in order, which is a very much more serious matter, and should have a great deal more study.

A park fairly well managed near a large town, will surely become a new centre of that town. With the determination of location, size, and boundaries should therefore be associated the duty of arranging new trunk routes of communication between it and the distant parts of the town existing and forecasted.

These may be either narrow informal elongations of the park, varying say from two to five hundred feet in width, and radiating irregularly from it, or if, unfortunately, the town is already laid out in the unhappy way that New York and Brooklyn, San Francisco and Chicago, are, and, I am glad to say, Boston is not, on a plan made long years ago by a man who never saw a spring-carriage, and who had a conscientious dread of the Graces, then we must probably adopt formal Park-ways. They should be so planned and constructed as never to be noisy and seldom crowded, and so also that the straightforward movement of pleasure-carriages need never be obstructed, unless at absolutely necessary crossings, by slow-going heavy vehicles used for commercial purposes. If possible, also, they should be branched or reticulated with other ways of a similar class, so that no part of the town should finally be many minutes' walk from some one of them; and they should be made interesting by a process of planting and decoration,

so that in necessarily passing through them, whether in going to or from the park, or to and from business, some substantial recreative advantage may be incidentally gained. It is a common error to regard a park as something to be produced complete in itself, as a picture to be painted on canvas. It should rather be planned as one to be done in fresco, with constant consideration of exterior objects, some of them quite at a distance and even existing as yet only in the imagination of the painter.

I have thus barely indicated a few of the points from which we may perceive our duty to apply the means in our hands to ends far distant, with reference to this problem of public recreations. Large operations of construction may not soon be desirable, but I hope you will agree with me that there is little room for question, that reserves of ground for the purposes I have referred to should be fixed upon as soon as possible, before the difficulty of arranging them, which arises from private building, shall be greatly more formidable than now.

To these reserves, — though not a dollar should be spent in construction during the present generation, — the plans of private construction would necessarily, from the moment they were established, be conformed.

I by no means wish to suggest that nothing should be done for the present generation; but only, that whatever happens to the present generation, it should not be allowed to go on heaping up difficulties and expenses for its successors, for want of a little comprehensive and business-like foresight and study. In all probability it will be found that much can be done even for the present generation without greatly if at all increasing taxation, as has been found in New York.

But the question now perhaps comes up: How can a community best take this work in hand?

It is a work in which private and local and special interests will be found so antagonistic one to another, in which heated prejudices are so liable to be unconsciously established, and in which those who would be disappointed in their personal greeds by whatever good scheme may be studied out, are so likely to combine and concentrate force to kill it (manufacture public opinion, as the phrase is), that the ordinary organizations for municipal business are unsuitable agencies for the purpose. It would, perhaps, be a bold thing to say that the public in its own interest, and in the interest of all of whom the present public are the trustees, should see to it that the problem is as soon as possible put clean out of its own

hands, in order that it may be taken up efficiently by a small body of select men. But I will venture to say that until this in effect is done, the danger that public opinion may be led, by the application of industry, ingenuity, and business ability on the part of men whose real objects are perhaps unconsciously very close to their own pockets, to overrule the results of more comprehensive and impartial study, is much greater than in most questions of public interest.

You will not understand me as opposing or undervaluing the advantages of public discussion. What I would urge is, that park questions, and even the most elementary park questions, questions of site and outlines and approaches, are not questions to which the rule applies, that every man should look after his own interests, judge for himself what will favor his own interests, and exert his influence so as to favor them; but questions rather of that class, which in his private affairs every man of common sense is anxious, as soon as possible, to put into the hands of somebody who is able to take hold of them comprehensively as a matter of direct, grave, business responsibility.

It is upon this last point far more than upon any other that the experience of New York is instructive to other communities. I propose, therefore, to occupy your time a little while longer by a narration of those parts of this experience which bear most directly upon this point, and which will also supply certain other information which has been desired of me.

The New York legislature of 1851 passed a bill providing for a park on the east side of the island. Afterwards, the same legislature, precipitately and quite as an after-thought, passed the act under which the city took title to the site of the greater part of the present Central Park.

This final action is said to have been the result of a counter movement, started after the passage of the first bill merely to gratify a private grudge of one of the city aldermen.

When in the formation of the counter project, the question was reached, what land shall be named in the second bill, the originator turned to a map and asked: "*Now where shall I go?*" His comrade, looking over his shoulder, without a moment's reflection, put his finger down and said, "*Go there;*" the point indicated appearing to be about the middle of the island, and therefore, as it occurred to him, one which would least excite local prejudices.

The primary selection of the site was thus made in an off-hand way, by a man who had no special responsibility in the premises,

and whose previous studies had not at all led him to be well informed or interested in the purposes of a park.

It would have been difficult to find another body of land of six hundred acres upon the island (unless by taking a long narrow strip upon the precipitous side of a ridge), which possessed less of what we have seen to be the most desirable characteristics of a park, or upon which more time, labor, and expense would be required to establish them.

But besides the topographical objections, when the work of providing suitable facilities for the recreation of the people upon this ground came to be practically and definitely considered, defects of outline were discerned, the incomplete remedy for which has since cost the city more than a million of dollars. The amount which intelligent study would have saved in this way if applied at the outset, might have provided for an amplification of some one of the approaches to the Park, such as, if it were now possible to be gained at a cost of two or three million dollars, I am confident would, if fairly set forth, be ordered by an almost unanimous vote of the tax-payers of the city. Public discussion at the time utterly failed to set this blundering right. Nor was public opinion then clearly dissatisfied with what was done or with those who did it.

During the following six years there was much public and private discussion of park questions; but the progress of public opinion, judged simply by the standard which it has since formed for itself, seems to have been chiefly backward.

This may be, to a considerable degree, accounted for by the fact that many men of wealth and influence — who, through ignorance and lack of mature reflection on this subject, were unable to anticipate any personal advantage from the construction of a park — feared that it would only add to their taxes, and thus were led to form a habit of crying down any hopeful anticipations.

The argument that certain towns of the old country did obtain some advantage from their parks, could not be refuted, but it was easy to say, and it was said, that "our circumstances are very different: surrounded by broad waters on all sides, open to the sea breezes, we need no artificial breathing-places; even if we did, nothing like the parks of the old cities under aristocratic government would be at all practicable here."

This assertion made such an impression as to lead many to believe that little more had better be done than to give the name of park to the ground which it was now too late to avoid tak-

ing. A leading citizen suggested that nothing more was necessary than to plough up a strip just within the boundary of the ground and plant it with young trees, and chiefly with cuttings of the poplar, which afterwards, as they came to good size, could be transplanted to the interior, and thus the Park would be furnished economically and quite well enough for the purposes it would be required to serve.

Another of distinguished professional reputation seriously urged through the public press, that the ground should be rented as a sheep-walk. In going to and from their folds the flocks would be sure to form trails which would serve the public perfectly well for foot-paths; nature would in time supply whatever else was essential to form a quite picturesque and perfectly suitable strolling ground for such as would wish to resort to it.

It was frequently alleged, and with truth, that the use made of the existing public grounds was such as to develop riotous and licentious habits. A large park, it was argued, would inevitably present larger opportunities, and would be likely to exhibit an aggravated form of the same tendencies, consequently anything like refinement of treatment would be entirely wasted.

A few passages from a leading article of the "Herald" newspaper, in the seventh year of the enterprise, will indicate what estimate its astute editor had then formed of the prevailing convictions of the public on the subject: —

"It is all folly to expect in this country to have parks like those in old aristocratic countries. When we open a public park Sam will air himself in it. He will take his friends whether from Church Street, or elsewhere. He will knock down any better dressed man who remonstrates with him. He will talk and sing, and fill his share of the bench, and flirt with the nursery-maids in his own coarse way. Now we ask what chance have William B. Astor and Edward Everett against this fellow-citizen of theirs? Can they and he enjoy the same place? Is it not obvious that he will turn them out, and that the great Central Park will be nothing but a great bear-garden for the lowest denizens of the city, of which we shall yet pray litanies to be delivered?"

In the same article it was argued that the effect of the construction of the Park would be unfavorable to the value of property in its neighborhood, except as, to a limited extent, it might be taken up by Irish and German liquor dealers as sites for dram-shops and lager-bier gardens.

There were many eminent citizens, who to my personal knowledge, in the sixth, seventh, and eighth year after the passage of the act, entertained similar views to those I have quoted.

I have been asked if I supposed that "gentlemen" would ever resort to the Park, or would allow their wives and daughters to visit it? I heard a renowned lawyer argue that it was preposterous to suppose that a police force would do anything toward preserving order and decency in any broad piece of ground open to the general public of New York. And after the work began, I often heard the conviction expressed that if what was called the reckless, extravagant, inconsiderate policy of those who had the making of the Park in charge, could not be arrested, the weight of taxation and the general disgust which would be aroused among the wealthy classes would drive them from the city, and thus prove a serious injury to its prosperity.

"Why," said one, a man whom you all know by reputation, and many personally, "I should not ask for anything finer in my private grounds for the use of my own family." To whom it was replied that possibly grounds might not unwisely be prepared even more carefully when designed for the use of two hundred thousand families and their guests, than when designed for the use of one.

The constantly growing conviction that it was a rash and ill-considered undertaking, and the apprehension that a great deal would be spent upon it for no good purpose, doubtless had something to do with the choice of men, who in the sixth year were appointed by the Governor of the State, commissioners to manage the work and the very extraordinary powers given them. At all events, it so happened that a majority of them were much better known from their places in the directory of banks, railroads, mining, and manufacturing enterprises, than from their previous services in politics; and their freedom to follow their own judgment and will, in respect to all the interior matters of the Park, was larger than had for a long time been given to any body of men charged with a public duty of similar importance.

I suppose that few of them knew or cared more about the subject of their duties at the time of their appointment, than most other active business men. They probably embodied very fairly the average opinion of the public, as to the way in which it was desirable that the work should be managed. If, then, it is asked, how did they come to adopt and resolutely pursue a course so very different from that which the public opinion seemed to expect of them, I think that the answer must be found in the fact that they had not wanted or asked the appointment; that it was made absolutely free from any condition or obligation to serve a party, a faction, or a person; that owing to the extraordinary powers given

them, their sense of responsibility in the matter was of an uncommonly simple and direct character, and led them with the trained skill of business men to go straight to the question: —

"Here is a piece of property put into our hands. By what policy can we turn it to the best account for our stockholders?"

It has happened that instead of being turned out about the time they had got to know something about their special business, these commissioners have been allowed to remain in office to this time — a period of twelve years.

As to their method of work, it was as like as possible to that of a board of directors of a commercial corporation. They quite set at defiance the ordinary ideas of propriety applied to public servants, by holding their sessions with closed doors, their clerk being directed merely to supply the newspapers with reports of their acts. They spent the whole of the first year on questions simply of policy, organization, and plan, doing no practical work, as it was said, at all.

When the business of construction was taken hold of, they refused to occupy themselves personally with questions of the class which in New York usually take up nine tenths of the time and mind of all public servants, who have it in their power to arrange contracts and determine appointments, promotions, and discharges. All of these they turned over to the heads of the executive operations.

Now, when these deviations from usage were conjoined with the adoption of a policy of construction for which the public was entirely unprepared, and to which the largest tax-payers of the city were strongly opposed, when also those who had a variety of private axes to grind, found themselves and their influence, and their friends' influence, made nothing of by the commissioners, you may be sure that public opinion was manufactured against them at a great rate. The Mayor denounced them in his messages; the Common Council and other departments of the city government refused to coöperate with them, and were frequently induced to put obstructions in their way; they were threatened with impeachment and indictment; some of the city newspapers attacked them for a time in every issue; they were caricatured and lampooned; their session was once broken up by a mob, their business was five times examined (once or twice at great expense, lawyers, accountants, engineers, and other experts being employed for the purpose) by legislative investigating committees. Thus for a time public opinion, through nearly all the channels open to it, apparently set against them like a torrent.

No men less strong, and no men less confident in their strength than these men — by virtue in part of personal character, in part of the extraordinary powers vested in them by the legislature, and in part by the accident of certain anomalous political circumstances — happened to be, could have carried through a policy and a method which commanded so little immediate public favor. As it was, nothing but personal character, the common impression that after all they were honest, saved them. By barely a sabre's length they kept ahead of their pursuers, and of this you may still see evidence here and there in the park, chiefly where something left to stop a gap for the time being has been suffered to produce lasting defects. At one time nearly four thousand laborers were employed; and for a year at one point, work went on night and day in order to put it as quickly as possible beyond the reach of those who were bent on stopping it. Necessarily, under such circumstances, the rule obtains: "Look out for the main chance; we may save the horses, we must save the guns;" and if now you do not find everything in perfect parade order, the guns, at all events, were saved.

To fully understand the significance of the result so far, it must be considered that the Park is to this day, at some points, incomplete; that from the centre of population to the midst of the Park the distance is still four miles; that there is no steam transit; that other means of communication are indirect and excessively uncomfortable, or too expensive. For practical every-day purposes to the great mass of the people, the Park might as well be a hundred miles away. There are hundreds of thousands who have never seen it, more hundreds of thousands who have seen it only on a Sunday or holiday. The children of the city to whom it should be of the greatest use, can only get to it on holidays or in vacations, and then must pay car-fare both ways.

It must be remembered, also, that the Park is not planned for such use as is now made of it, but with regard to the future use, when it will be in the centre of a population of two millions hemmed in by water at a short distance on all sides; and that much of the work done upon it is, for this reason, as yet quite barren of results.

The question of the relative value of what is called off-hand common sense, and of special, deliberate, business-like study, must be settled in the case of the Central Park, by a comparison of benefit with cost. During the last four years over thirty million visits have been made to the Park by actual count, and many have passed

uncounted. From fifty to eighty thousand persons on foot, thirty thousand in carriages, and four to five thousand on horseback, have often entered it in a day.

Among the frequent visitors, I have found all those who, a few years ago, believed it impossible that there should ever be a park in this republican country, — and especially in New York of all places in this country, — which would be a suitable place of resort for "gentlemen." They, their wives and daughters, frequent the Park more than they do the opera or the church.

There are many men of wealth who resort to the Park habitually and regularly, as much so as business men to their places of business. Of course, there is a reason for it, and a reason based upon their experience.

As to the effect on public health, there is no question that it is already great. The testimony of the older physicians of the city will be found unanimous on this point. Says one: "Where I formerly ordered patients of a certain class to give up their business altogether and go out of town, I now often advise simply moderation, and prescribe a ride in the Park before going to their offices, and again a drive with their families before dinner. By simply adopting this course as a habit, men who have been breaking down frequently recover tone rapidly, and are able to retain an active and controlling influence in an important business, from which they would have otherwise been forced to retire. I direct school-girls, under certain circumstances, to be taken wholly, or in part, from their studies, and sent to spend several hours a day rambling on foot in the Park."

The lives of women and children too poor to be sent to the country, can now be saved in thousands of instances, by making them go to the Park. During a hot day in July last, I counted at one time in the Park eighteen separate groups, consisting of mothers with their children, most of whom were under school-age, taking picnic dinners which they had brought from home with them. The practice is increasing under medical advice, especially when summer complaint is rife.

The much greater rapidity with which patients convalesce, and may be returned with safety to their ordinary occupations after severe illness, when they can be sent to the Park for a few hours a day, is beginning to be understood. The addition thus made to the productive labor of the city is not unimportant.

The Park, moreover, has had a very marked effect in making the city attractive to visitors, and in thus increasing its trade, and caus-

ing many who have made fortunes elsewhere to take up their residence and become tax-payers in it, — a much greater effect in this way, beyond all question, than all the colleges, schools, libraries, museums, and art-galleries which the city possesses. It has also induced many foreigners who have grown rich in the country, and who would otherwise have gone to Europe to enjoy their wealth, to settle permanently in the city.

And what has become of the great Bugaboo? This is what the "Herald" of later date answers: —

"When one is inclined to despair of the country, let him go to the Central Park on a Saturday, and spend a few hours there in looking at the people, not at those who come in gorgeous carriages, but at those who arrive on foot, or in those exceedingly democratic conveyances, the street-cars; and if, when the sun begins to sink behind the trees, he does not arise and go homeward with a happy swelling heart," and so on, the effusion winding up thus: "We regret to say that the more brilliant becomes the display of vehicles and toilettes, the more shameful is the display of bad manners on the part of the —— extremely fine-looking people who ride in carriages and wear the fine dresses. We must add that the pedestrians always behave well."

Here we touch a fact of more value to social science than any other in the history of the Park; but to fully set it before you would take an evening by itself. The difficulty of preventing ruffianism and disorder in a park to be frequented indiscriminately by such a population as that of New York, was from the first regarded as the greatest of all those which the commission had to meet, and the means of overcoming it cost more study than all other things.

It is, perhaps, too soon to judge of the value of the expedients resorted to, but there are as yet a great many parents who are willing to trust their school-girl daughters to ramble without special protection in the Park, as they would almost nowhere else in New York. One is no more likely to see ruffianism or indecencies in the Park than in the churches, and the arrests for offenses of all classes, including the most venial, which arise simply from the ignorance of country people, have amounted to but twenty in the million of the number of visitors, and of these, an exceedingly small proportion have been of that class which was so confidently expected to take possession of the Park and make it a place unsafe and unfit for decent people.

There is a good deal of delicate work on the Park, some of it placed there by private liberality — much that a girl with a parasol,

or a boy throwing a pebble, could render valueless in a minute. Except in one or two cases where the ruling policy of the management has been departed from, — cases which prove the rule, — not the slightest injury from wantonness, carelessness, or ruffianism has occurred.

Jeremy Bentham, in treating of "The Means of Preventing Crimes," remarks that any innocent amusement that the human heart can invent is useful under a double point of view: first, for the pleasure itself which results from it; second, from its tendency to weaken the dangerous inclinations which man derives from his nature.

No one who has closely observed the conduct of the people who visit the Park, can doubt that it exercises a distinctly harmonizing and refining influence upon the most unfortunate and most lawless classes of the city, — an influence favorable to courtesy, self-control, and temperance.

At three or four points in the midst of the Park, beer, wine, and cider are sold with other refreshments to visitors, not at bars, but served at tables where men sit in company with women. Whatever harm may have resulted, it has apparently had the good effect of preventing the establishment of drinking-places on the borders of the Park, these not having increased in number since it was opened, as it was originally supposed they would.

I have never seen or heard of a man or woman the worse for liquor taken at the Park, except in a few instances where visitors had brought it with them, and in which it had been drank secretly and unsocially. The present arrangements for refreshments I should say are makeshift and most discordant with the design.

Every Sunday in summer from thirty to forty thousand persons, on an average, enter the Park on foot, the number on a very fine day being sometimes nearly a hundred thousand. While most of the grog-shops of the city were effectually closed by the police under the Excise Law on Sunday, the number of visitors to the Park was considerably larger than before. There was no similar increase at the churches.

Shortly after the Park first became attractive, and before any serious attempt was made to interfere with the Sunday liquor trade, the head-keeper told me that he saw among the visitors the proprietor of one of the largest "saloons" in the city. He accosted him and expressed some surprise; the man replied, "I came to see what the devil you'd got here that took off so many of my Sunday customers."

I believe it may be justly inferred that the Park stands in competition with grog-shops and worse places, and not with the churches and Sunday-schools.

Land immediately about the Park, the frontage on it being seven miles in length, instead of taking the course anticipated by those opposed to the policy of the Commission, has advanced in value at the rate of two hundred per cent. per annum.

The cost of forming the Park, owing to the necessity of overcoming the special difficulties of the locality by extraordinary expedients, has been very great ($5,000,000); but the interest on it would even now be fully met by a toll of three cents on visitors coming on foot, and six cents on all others; and it should be remembered that nearly every visitor in coming from a distance voluntarily pays much more than this for the privilege.

It is universally admitted, however, that the cost, including that of the original off-hand common-sense blunders, has been long since much more than compensated by the additional capital drawn to the city through the influence of the Park.

A few facts will show you what the change in public opinion has been. When the Commissioners began their work, six hundred acres of ground was thought by many of the friends of the enterprise to be too much, by none too little for all park purposes. Since the Park has come into use, the amount of land laid out and reserved for parks in the two principal cities on the bay of New York, has been increased to more than three times that amount, the total reserve for parks alone now being about two thousand acres, and the public demand is now for more, not less. Twelve years ago there was almost no pleasure-driving in New York. There are now, at least, ten thousand horses kept for pleasure-driving. Twelve years ago there were no roadways adapted to light carriages. There are now fourteen miles of rural drive within the parks complete and in use, and often crowded, and ground has been reserved in the two cities and their suburbs for fifty miles of park-ways, averaging, with their planted borders and inter-spaces, at least one hundred and fifty feet wide.[1]

The land-owners had been trying for years to agree upon a new plan of roads for the upper part of Manhattan Island. A special commission of their own number had been appointed at their solicitation, but had utterly failed to harmonize conflicting interests. A

[1] The completi of a few miles of these will much relieve the drives of the park, which, on many accounts, should never be wi than ordinary public requirements imperatively demand.

year or two after the Park was opened, they went again to the Legislature and asked that the work might be put upon the Park Commissioners, which was done, giving them absolute control of the matter, and under them it has been arranged in a manner, which appears to be generally satisfactory, and has caused an enormous advance of the property of all those interested.

At the petition of the people of the adjoining counties, the field of the Commissioners' operations has been extended over their territory, and their scheme of trunk-ways for pleasure-driving, riding, and walking has thus already been carried far out into what are still perfectly rural districts.

On the west side of the harbor there are other commissioners forming plans for extending a similar system thirty or forty miles back into the country, and the Legislature of New Jersey has a bill before it for laying out another park of seven hundred acres.

I could enforce the chief lesson of this history from other examples at home and abroad. I could show you that where parks have been laid out and managed in a temporary, off-hand, common-sense way, it has proved a penny-wise pound-foolish way, injurious to the property in their neighborhood. I could show you more particularly how the experience of New York, on the other hand, has been repeated over the river in Brooklyn.

But I have already held you too long. I hope that I have fully satisfied you that this problem of public recreation grounds is one which, from its necessary relation to the larger problem of the future growth of your honored city, should at once be made a subject of responsibility of a very definite, very exacting, and, consequently, very generous character. In no other way can it be adequately dealt with.

ART EDUCATION IN AMERICA.

READ BEFORE THE AMERICAN SOCIAL SCIENCE ASSOCIATION, AT THE LOWELL INSTITUTE, BOSTON, FEBRUARY 22, 1870. — BY C. C. PERKINS.

WHEN we commenced this first century of our national existence, we were newly emancipated colonies whose richest possession was a God-given love of liberty. We are at present one of the great powers of the earth, and have reason for well-justified pride in the history of the hundred years which have now so nearly elapsed. We have sent ships into the uttermost parts of the world, and by commerce have increased in wealth; we have manned great fleets, and have equipped great and heroic armies; we have intersected the vast area of our territory with a net-work of iron, and have brought its farthest extremities into possibility of instant communication; we have built countless cities, and enriched them with every kind of useful and charitable institution, and have gained for ourselves a world-wide reputation in science and in literature. All this and more, for we have given to the world examples of men in power whose reputation is unstained by any shadow of self-seeking ambition, and of men in private life whose overflowing charity has won for them the love and admiration of mankind. These are great things, some of them the greatest things which a nation can do. And yet it seems to me, that we can hardly arrogate to our country the title of the model republic so long as we are content to live without art, which both in ancient and in modern times has been regarded by all civilized nations as one of the crowning glories of a great state, and neglect all means for the cultivation of an appreciation of its beauties.

Plato thought it most necessary for the well-being of his model republic that the youth who were to be its guardians should be trained to an appreciation of the beautiful, as a road to the practice of the good; he believed that such an education would so inspire the whole creature with a desire for completeness, that having attained it he would never rest until he had brought his moral nature up to the same level of cultivation. He reasons that "as good rhythm, graceful and elegant speaking, and excellence of sense flowing from good and virtuous dispositions tend to inspire

the same disposition in others, so bad rhythm, and ungraceful and indecorous demeanor, are companions of bad speech and bad disposition. Contrasts of this kind," he says, "pervade not only speech and song, but also every branch of visible art: painting, architecture, weaving, embroidery, pottery, and even the natural bodies of animals and plants. In all of these we distinguish grace and beauty, the accompaniments of a good and sober disposition, from ungracefulness and deformity, visible signs of the contrary disposition. Now our youthful guardians, if they are ever to become qualified for their functions, must be trained to recognize and copy such grace and beauty. For this purpose our poets, painters, architects, and artisans must be prohibited from embodying in their works any ungraceful or unseemly type. None will be tolerated as artists except such as can detect and embody the type of the beautiful. Our youth will thus insensibly contract exclusive familiarity, both through the eye and through the ear, with beauty in its various manifestations, so that their minds will be brought into harmonious preparation for the subsequent influence of beautiful discourse."

If Plato and many other wise men who have agreed with him are right in their opinions upon this subject, then we are wrong in regarding it as a matter of small importance to the commonwealth. That we do so is doubtless owing in a great measure to the peculiar circumstances of our history. As Minerva sprang fully armed from the head of Jupiter, so did we spring into life out of the old European civilization. We had no barbaric youth like that of other nations, no art heritage to rouse the love of art in us, no accumulated weight of tradition to influence us; we did not work up to the level of modern attainment from rudimentary beginnings, and never learnt the alphabet of art as a natural expression. Planted in a new world as a civilized people, we were at first completely absorbed in the struggle for life and liberty, and when the first was assured and the second won were too far advanced in other ways to begin, as all nations who have ever had an art of their own have begun, by making rude efforts out of which they gradually progressed to more or less perfect results.

Among the Greeks, for instance, the feeling for beauty, individual form, and characteristic representation, expressed itself in art centuries after it had expressed itself in poetry, for when Homer described the golden statues of the Palace of Alcinous, the basreliefs upon the shield of Achilles, and the red-stained prows of the ships of Ulysses, sculpture, bronze-casting and painting were unpracticed arts in Greece. In those pre-historic times stones, pillars,

and stakes were set up as symbols of the gods at Argos, Thespis, and Sparta; then a step was made towards anthropomorphism (*i. e.* the embodiment of an abstract idea in human shape), by putting a rude head upon a column, or by carving an almost shapeless doll in wood, which was washed, painted, and clothed in real draperies. Next whole figures with closed eyes, side-clinging arms, and undivided legs were made out of wood, which was regarded as a more sacred material than stone. At last the mythic artist Dædalus (whose name represents a period of progress), opened the eyes and loosed the feet of his statues, giving them such an appearance of life that the ignorant people are said to have fastened them with chains lest their new gods, who seemed able to walk, should desert them. The successors of the Dædalids gaining skill to imitate nature more closely, developed the Archaic style, and statues, though somewhat stiffly posed, were embued with a refined feeling, and clothed in symmetrical and elegantly disposed draperies. Lastly, by its faithful but lifeless imitation of nature, the Æginetan school paved the way for the great school of Phidias, in which the ideal style found its perfect expression.

Such an art development as we have rapidly sketched, is not now possible in any part of the globe. Seas and mountains no longer form natural barriers behind which national individualities can grow undisturbed. What one nation knows immediately becomes the property of all other nations, and indifference or want of cultivation, provided the natural ability be equal, is the only obstacle to equal attainment. Our object then is to discover how we can bring ourselves into the most favorable conditions for the development of our artistic capacity. Manifestly this can only be accomplished by surrounding ourselves with the best models of art, through the study of which we may hope to create a high standard of taste. This is done by men who desire to cultivate their natural powers in any branch of education. The poet studies Homer, Dante, and Shakespeare; the historian pores over the pages of Thucydides, Tacitus, and Gibbon; the orator forms himself upon the eloquent phrases of Demosthenes, Cicero, and Burke; the musician upon the works of Bach, Mozart, and Beethoven; the sculptor upon the masterpieces of Greek sculpture; thus all acquire refinement of taste, and create within themselves a tribunal before which all works are unconsciously arraigned and judged according to an acquired standard of perfection.

Now until we do for art by the formation of museums what we

have done for science and literature by the endowment of special schools and public libraries, we cannot hope to gain this standard.

In thus speaking I do not intend to suggest that the cultivation of a sense of the beautiful as revealed to us in art, is equally important with that of developing all our faculties by the reading of good and great books. Such a proposition would be absurd, for books are objects of primal necessity, without which we should be barbarians. My object is to establish the relative importance of art education by means of art schools and public museums at this present stage of our national existence, and I think all will agree with me when I say that a people which pretends to rate intellectual culture as highly as we now do in other departments of human knowledge, cannot suffer itself to ignore its importance in this.

Here in New England, thank God, men are always ready to promote culture, and it would show an unpardonable ignorance of the past, and a want of confidence in the present, to suppose that the public will refuse to support any educational scheme, when once convinced of its importance. In a new country, where men's chief aims are the acquisition of wealth and political advancement, it is especially necessary to drink from every pure well of culture, that the material aims of life may be sometimes forgotten, and man refreshed and strengthened by the consideration of objects which, though less practically important, have their high and noble uses.

Nor are these objects out of our reach, as some might suppose, for we can as easily fill our museums with works of art, as we can fill our libraries with books. But you will say books are multiplied in cheap and available forms; a poor man may own a Cicero or a Shakespeare, while the richest can hardly buy a Greek statue or a picture by Raphael; we can afford libraries, though we cannot afford to purchase original works of art for museums. Your libraries are however not filled with original manuscripts, neither need your museums be filled with original marbles. Printing gives you cheap books, and casting in plaster will give you cheap reproductions of all plastic forms. Thus you see that a want of means of cultivation would be quite as poor a plea for refusal to improve your minds in the one case as in the other.

Could we not hope to cultivate the national taste or national standard unless we were prepared to spend $120,000 for one picture or $200,000 for a statue, you might consider all schemes for art education quixotic; but since these sums, which in Europe are often expended upon single original works, would suffice to erect a fire-proof building and fill it with reproductions of antique

and mediæval works in metal, ivory, etc., etc., obtained by electrotype, galvano plastic, various processes of casting, elastic moulding, and photography, all of which are quite as efficacious for educational purposes as the originals which are out of our reach, you will perhaps regard the undertaking as feasible. The catalogues of reproductions of objects of art published by the Science and Art Department of the South Kensington Museum show how much can be acquired. They contain priced lists of art objects of every kind: cups, "plateaux," tankards, and medals, German, French, Italian and Arabic; wax impressions from seals in the British Museum of English abbeys, corporations, and colleges; casts of Greek, Egyptian, and Assyrian bas-reliefs, architectural mouldings and ornaments, as well as of Renaissance gates, façade sculptures, and monuments from churches and palaces, and an immense number of photographs of works of decorative art in pottery, porcelain, and glass; as well as of original drawings by Raphael, Michael Angelo and all the great masters of the Italian, French, and German schools.

When the great exhibition was held at Paris, several princes of the reigning families of Europe entered into a convention, whereby they agreed mutually to assist each other in procuring casts and copies of national objects for the promotion of art. The Science and Art Department of the South Kensington Museum acted most energetically in the matter, and exhibited in the British section of the Exhibition numerous reproductions of French, Italian, Spanish, Portuguese, German, Swiss, Russian, Hindoo, Keltic, and English works of art. Information was demanded about objects of art in European palaces, state collections, treasuries of cathedrals, churches, monasteries, and private galleries, and a system of international exchange was proposed. Thus has a most precious means been opened to us in America of filling our national museums with objects adapted for the study of every branch of activity in art.

Some persons affect to despise such collections on account of the common materials of which the objects are composed; but this is not the point of view of those of us who consider that any material, however intrinsically precious, is ennobled or degraded by reason of the high or low thoughts of which it is made the vehicle of communication; who prefer a fresh cast of a fine Greek statue to the best copy in marble which could be made, because, being neither modified nor changed through the inevitable personality of an intermediate hand however conscientious and skillful, it is as nearly as possible a fac-simile of the original.

To us on this side of the Atlantic, plaster, the vile substance which can reproduce every form which it touches, is indeed precious, because through it we may obtain the means of working out our art education.

Do not suppose, however, that in thus speaking I would underrate painting as a means to this end. I reason that as we can hardly hope ever to have many original ancient or mediæval works of art in the United States, because they are every year being garnered up in the great European galleries, where they are likely to remain, and also because their already immense value is constantly on the rise, we must content ourselves with reproductions of statues and copies of pictures. Under these conditions, the faithful transcript of the original is a matter of primal necessity to us; therefore plaster casts are more desirable than copies of pictures or frescoes, which at the best must fall below the originals, or photographs of them which disturb harmony by falsifying masses of color, or engravings of them which, however skillfully made, are translations into a foreign tongue. I except, of course, photographs from original drawings, and engravings like those of Durer and Rembrandt, which are original works.

There is also another point of view to be taken about the importance of providing ourselves with casts of great sculptural works, and this is that of all arts, not even excepting architecture, sculpture requires most study for its appreciation. Unlike painting, in the taste for certain branches of which we are unconsciously educated by natural objects, and which by its wider range of subject, its use of color, and direct imitation of surrounding objects, immediately attracts general sympathy; unlike music, which by variety of rhythm, association, and a certain magnetic action upon the feelings, acts, at least in its lighter forms, upon the uneducated ear, sculpture is so abstract and ideal a realization of thought, that it appeals in the first instance much less forcibly than the sister arts, even to those natures peculiarly alive to artistic influences. This was not the case among the Greeks, whose taste was formed to an appreciation of the beauties of the human figure by the public games which afforded constant opportunities for its display, and who daily looked upon draperies disposed upon it in exquisitely falling folds. Sculpture in Greece really "held the mirror up to nature," and spoke a natural and perfectly understood language. Their standard was constantly before the Greeks, and they instinctively used it as a test of the absolute truth of realistic, or the elevated truth of idealistic art. But with us the case is quite different,

for we habitually see the human body clothed in ungraceful and unartistic garments which conceal and disfigure its proportions and outlines. Nature was to the people of Hellas what their interpretation of it in sculpture is to us, a standard of judgment by which they measured the merit of plastic works; and as our standard is a human product, however high, and theirs was divine, our sculpture is necessarily very inferior to theirs. From our limited means of cultivation in the art of sculpture it is far less generally appreciated than that of painting. This is clearly seen by any one who visits any great European museum like the Louvre, where for one person in the sculpture gallery who seems to enjoy what he is looking at, fifty may be found among the pictures who appear to derive from them a vast amount of profitable pleasure.

That the Greeks rated sculpture so highly arose from the nature of their religion, and from its being the fittest medium for the visible rendering of beauty, as revealed in the human form, which was to them the true aim of art. The imitation of the beautiful by artists was prescribed by a Theban law, which punished all transgressors by a fine. There were, it is true, a few Greek painters, like Pauson the caricaturist, upon whose pictures Aristotle says the young ought not to look; or like Piræicus, who was contemptously called *Rhyparographus*, *i. e.*, the painter of vile things, because he exercised his brush upon such common objects as cobblers' stalls and barbers' shops; or like Dionysius, known as the *anthropograph*, the man-painter, because he followed nature too slavishly, and could not rise to the ideal style, in which alone it was permitted to represent gods and heroes. But these men and their imitators took a low rank, and were looked upon as having degraded art.

"Who," says an old epigrammatist in lines addressed to a very ugly man, "could wish to paint you whom no one would wish to see?" — lines which express a genuine Greek feeling, directly opposed to that which, as Lessing remarks, would prompt many modern artists to say, "Be as ugly as you will I shall paint you. Even if nobody wishes to see you, people will wish to see my picture, not because it is your portrait, but for the skill displayed in my reproduction of such a monster."

Here I must say one word more about collections of casts, in order to remove the impression, if by chance it exist in any one's mind, that they are valuable only to people who like ourselves have the misfortune to possess no originals. On the contrary, in the great European cities they are looked upon as of the first import-

ance, and this for many reasons, the chief of which is, that as no museum in the world possesses a complete collection of Greek or mediæval marbles and bronzes, any *one* is insufficient for the illustration of whole schools and phases of plastic art. It is therefore necessary to supply the missing links by casts, that the professor of archæology may be able to illustrate his lectures, and the student to understand the rise and progress of art. For this reason the British Museum, whose sculpture gallery surpasses all others in serial continuity as in perfection of single examples, sends to Munich for casts of the Ægina marbles, and in return supplies Munich with plaster models of those from the Parthenon. Thus as Phœnicia gave the alphabet to Greece, so Bavaria gives England the letters of art and receives in return the "words which cannot die." The comparison is a fair one, for as without a knowledge of the elements of written language, the winged thoughts of the great minds of Hellas could never have taken enduring shape, so neither without the literal rendering of nature which characterizes works of the Æginetan school could those solid foundations of Attic art have been laid, upon which the hand of Phidias reared an imperishable structure, which even now in its shattered and mutilated state constitutes an unattainable model of perfection.

What Munich with its Glyptothek, and London with its British Museum are obliged to do partially, *we in America must do wholly*, even on a greater scale than it has been done in the new museum at Berlin, where an immense collection of casts of Greek, Roman, German, and Italian works has been made, which only needs to be arranged chronologically to be well-nigh perfect. And let me tell you, that though they are made of plaster, these casts are lodged in lofty and magnificent galleries, and treated with as much consideration as if they were all originals. When may we hope to see the like in an American city? Soon, indeed, if we can all be brought to feel the need of it. It is our proud boast that whatever is done for our cultivation in this land is done for the people and by the people. We have here no paternal government to take the task of forming museums off our hands, no galleries formed by successive monarchs, no royal grants for the purchase of pictures, no princely families, who through many generations have amassed treasures of art, no centralized power which can arbitrarily spend the public money upon such objects; the task must be accomplished by public spirit or by private munificence if at all. As yet, however, public spirit has not been awakened, and there have been no very wealthy individuals amongst us who valued art sufficiently themselves to appreciate the needs of the community.

Now, as long as people labor under the deep delusion that a knowledge of art is a gift of bounteous Nature, and does not like every other knowledge require hard work to obtain it, individuals and communities will consider means for the education of the national taste superfluous. Every moment we hear persons who have never devoted a serious hour to the cultivation of their æsthetic faculties say, "This is a good picture," or "That is a bad statue," which in point of fact means, This pleases or displeases my uncultivated taste. Armed with this faith in their judgment wealthy Americans every year spend large sums of money upon works of art in Europe, without any suspicion that they are utterly incompetent to select them, because they have never taken pains or had no spare time to learn, what a good picture or a good statue is; and for want of such knowledge when some great masterpiece comes into the market they neglect to acquire it, because it gives them no pleasure, or so little, that the price which they would have to pay for it seems preposterous. Thus, instead of making America the richer by bringing back with them a Raphael or a Rembrandt, they spend the sum which would have bought either or both, in modern landscapes, "tableaux de genre," or bad copies of old pictures, and flatter themselves that they have got a great deal more for their money.

Any one who watches the art sales in Paris and London cannot fail to be surprised at the large number of excellent, sometimes even first-rate works of art which are every year sold by the auctioneer, after their acquisition has been closely disputed by French, English, or Russian agents and dealers. At intervals a great collection like the Campana Museum is offered for sale, whose acquisition would have made us possessors of some of the finest vases, terra-cottas, and gold ornaments in the world, besides a number of antique statues and busts. I am assured that an effort was made at the time, by some cultivated persons in New York, to raise money for the purpose of purchasing at least a portion of these treasures, but the appeal met with total neglect, and they were divided between Russia and France, already so rich in the like objects. So was it when the Pourtales, the Blacas, and the Morny galleries were sold, and so it is at the present moment, while the contents of San Donato, the villa of Prince Demidoff, are being sold in Paris; and so it will continue to be, until appreciation, *obtained by knowledge*, gives us the desire to spend money upon fine works of art. "Judgment, even in things self-evident," says Reid, "needs a clear, distinct, and steady conception of the

things about which we judge. Even in things obvious, the most knowing derive their knowledge from instruction and information," which in nine cases out of ten such persons as we have been speaking of do not give themselves the smallest pains to get.

Our natural sympathies for painting, for sculpture, or for music are like specks of gold found in quartz, which perhaps indicate a hidden auriferous deposit, but that any such exists none can know until the rock has been blasted, and the deep shaft sunk. The miner may have but his pains for his labor, but at the worst this is not the case with one who strives to cultivate his artistic instincts; for even where they are feeblest it is astonishing how much can be done to develop them by well-directed effort. Here, as in all other branches of human knowledge, man shows that progressive capacity which is one of the surest guaranties of his immortality.

Not less important than the establishment of museums with a view to general cultivation, is the opening of schools of design as bearing upon improvement in industrial art. A few such schools already exist in this State, and there is hope of many more, if, as we cannot doubt, the Legislature gives its sanction to the very laudable project conceived by a gentleman of this city, and already shaped into a bill, to connect them by law with the public schools throughout the State. Perhaps in course of time, when we have schools of design scattered throughout the land, we may see our future art-museums filling toward these institutions the position now occupied by the science and art department of the South Kensington Museum toward similar schools in Great Britain. These it partially aids and encourages, without superseding public exertions for the promotion of instruction in art, by offering means and appliances for study in the Museum of Ornamental Manufactures at South Kensington; by enabling the students to obtain the best instruction in all the schools on payment of moderate fees in aid of the expenses; and by allowing elementary schools, night-classes, and schools of art to purchase copies, models, and examples for teaching elementary drawing, at a reduction on the net cost; by loaning art-collections (made with a view to illustrate the history, theory, and practical application of decorative art) to local schools for exhibition; and also by giving prizes and awarding medals to good teachers, as well as to pupils for drawings, models, and paintings of special excellence.

The effect of such a broad scheme of substantial encouage-

ment and wisely ordered instruction is of course immense, and yet its action, and that of all other means of the same kind employed in Great Britain toward cultivation in those branches of technical education which are specially affected by study of art, are confessedly insufficient to bring English workmen up to the Continental standard of excellence in manufacture. Such at least is the opinion of men of weight on both sides of the Channel, — an opinion strikingly confirmed by the observations of those intelligent English artisans who went over to Paris at the time of the Great Exhibition, to study their own departments of trade as represented by the products of foreign workshops. "The reports which they made to the Society of Arts," says Mr. Scott Russell, "indirectly treat the whole question of the social condition and the moral and religious education of the workmen, and of the duties which various governments have either neglected or performed in giving or withholding from the youth of a nation that intelligence, skill, and taste, which they unanimously declare education can promote and develop, if it cannot create."

Take, for instance, this testimony of a chair-maker, which is valuable as showing how highly he estimates the effect of objects of art upon men of his class:

"The art-workmen of France," he says, "have a great advantage over us in England: in Paris they are surrounded by works of taste, which none but the most obtuse can long remain uninfluenced by; their museums are central and numerous; they are surrounded by works they venerate and love, and their very nature gets impregnated with them."

So another artisan, a stone-mason, writes in the same strain: "The Frenchman's familiarity with art, and his early training in its principles, enable him to outstrip us; and as every building in Paris is more or less decorated with carving, you are at a loss to know how they get all their art-workmen; but the difficulty would not appear so much, if you could read the large placards in French which are posted up at the ends of the bridges and other public places, informing workmen where they can be taught drawing and modelling every evening free of expense." "When we come to high-class ornamentations," writes a china-painter, "in iron, earthenware, china, or glass, the superiority of French art is obvious. Where an intellectualism is concerned, or a free, educated hand is required in decoration, our deficiencies become apparent." "If English workmen are behind in this respect, it is not because art-genius is deficient in our nature, but because it is not developed

and encouraged sufficiently." "In every French town of any importance in a manufacturing point of view, in every district of all the principal cities, there is to be found the art-school, just as there is to be found the church or the baker's shop."

If English artisans are thus impressed by the superior advantages of their French brothers over the many which they enjoy at home, with what pity must they regard workmen in this country, for the education of whose eyes and hands no provision whatever is made by public bodies, and but little by private patrons! If they came here they would not wonder at the bad taste displayed in articles of furniture, lamps, and decorative objects, and would return home, like the French workmen who came to settle in New York, because they found that, for want of the highest models to keep them up to their acquired standard, they were rapidly degenerating to our level.

It is with taste as with morals: if we live carelessly in the midst of a corrupt society, we little by little lower our standard, and come to look with complacency upon things which formerly shocked us inexpressibly; so if we live with bad pictures and statues and ugly furniture around us and neglect to remind ourselves daily how defective they are, we run great risk of growing content with them.

No less than two hundred and thirty schools of design exist at Paris, which are wholly or partially supported by the government at an expense of 350,000 francs a year. They are frequented by apprentices, who there learn to distinguish between what is vicious and what is good in design, and thus taste in the manufacture of calicoes, laces, shawls, and decorative objects of all kinds is directly affected. The improved standard shows itself in the pattern of the housemaid's dress, as in that of the richest silk in the wardrobe of the Empress, in the form of the gewgaw earrings of the "grisette," as well as in the setting of the diamonds worn by the greatest ladies in the land.

And yet, despite all this, those specially interested in the maintenance of the high position long held by France every day express anxiety lest, for want of sufficient effort, she should be outstripped. They cite the great advance made all over Europe in the industrial arts since the Great Exhibition of 1851, and alarmed by that made in England and Germany, urge upon M. Richard, the new Minister of the Fine Arts, the importance of following the English initiative by establishing normal schools for the instruction of drawing-masters, whose competency to teach

shall be certified by diplomas of different degrees. Why, indeed, they say, should drawing-masters not be obliged to offer to the public the same guaranties of knowledge as any other professors? That they are not is due to the false idea that drawing is an art of luxury and amusement, rather than what it really is, a fruitful source of wealth to any country, whose teaching should not be confided to the first-comer.

Until the year 1851, England depended upon France for all designs used in her factories for the manufacture of goods. In order to free her from this state of dependence by bringing her industrial art up to a high level, Prince Albert soon after founded the South Kensington Museum, where professors of drawing could be educated, and sent to every part of the United Kingdom. The result was seen at the Paris Exhibition of 1861. During the ten intervening years, English workmen had made such progress in the arts of design as connected with industry, that the French jury was obliged to declare publicly, that if France would keep her place she must completely reorganize the system of instruction pursued in the schools of design at Paris. This reorganization having been effected it was found, that whereas in the year 1863 there were only 3,000 pupils in these schools, — to whose support the city contributed 35,000 francs a year, — in the year 1867 there were 12,000 students, who cost the city 312,000 francs. But to return to England in order to show you in a few words how greatly her national trade has increased since the establishment of the Kensington Museum: in 1866 the export trade of England in earthenware, porcelain, and carpets was seventy millions of dollars greater than in 1855. Such facts show that the establishment of the art institutions we advocate is a matter deserving the ardent support of all thinking men, as their advantageous action upon trade through the development of systematic technical education is certain.

Before passing to other matters, permit me to read to you some judicious remarks of a recent French writer, which show how an intelligent foreigner regards the prospects of art in America: —

"Art," he says, "has not yet really taken root there, either in the regions occupied by the Saxon race, or in those which were formerly possessions of the Spanish crown. A superior instruction in art can neither be improvised, nor imposed by force. The ground must first be prepared. Certain habits and ideas, a current, a tradition, must be formed.

"Less necessary in painting, if the artist be content to render in a simple manner the impression produced upon his mind, tradition (that is, the

collective wisdom of many generations embodied in methods of work modes of instruction, etc., etc.) is all-important in relation to sculpture and architecture. In sculpture, passion and genius are almost powerless without science, and in architecture, without knowledge. A country may possess clever engineers and mechanics, but their production will violate taste and shock the educated eye, because the forms which they invent are in nowise connected with those upon which our eyes are accustomed to rest, not being the result of certain exigencies which the art of construction should satisfy, and of the resources which it has at its disposition. When the Americans," he concludes, "shall have provided themselves with the best models, and refined their taste by studying them they may try their fortune, and give themselves up to the production of original works."

Now this is exactly the course which I trust we are about to take in Boston by founding a Museum of Art. The scheme seems to have a fair chance of success, if carried out on the principles which shaped it. These principles were, to make it an educational institution, like the South Kensington Museum, by filling it with reproductions of all the best antique and mediæval works, with photographs from original drawings, and with such valuable works of art as public-spirited persons and institutions, moved by the desire to make them generally useful and available, and certain of their being safely cared for in a large fire-proof building, may be disposed to give, or deposit there for a longer or shorter period.

Boston can need no better proof of the high character of the aims of the new museum than is offered to it by the direct participation of Harvard University, the Lowell and the Technological Institutes, the Athenæum and the Public Library, in its organization and administration. With trustees appointed by these institutions are associated a certain number of competent persons, who will aid them in the task of managing its material and artistic interests. With the heartiest wishes for the success of this project, and for that of the establishment of a similar museum at New York which was started simultaneously with it, I feel that the fate of both, and of others which will certainly arise in other American cities *if these are made all that they should be*, depends upon the amount of interest which the public can be induced to take in them. Does it seem unreasonable to hope that this will be great, since they are manifestly conducive to the benefit of all classes of the community?

Who is there amongst us that will not be the gainer if they are established? Is it the working-man? No, for the museum will

be to him a welcome place for recreation and rest. Is it the artisan? No, for at every step he will see objects calculated to awaken new ideas of form in his mind. Is it the manufacturer? No, for he will draw suggestions for novel designs from ancient and mediæval ornaments and arabesques, which will give his goods a new value in the market. Is it the artist? Surely he least of all, who will there be in his natural element, surrounded by silent and unanswerable masters whose voice cannot be gainsaid, whose excellences will spur him to exertion and check his rash self-confidence. Is it the scholar or the man of general culture? Again I say, No, for the masterpieces of ancient art which are exponents of national thought and development, guides to historical knowledge and verifiers of history, will give him precious aid in his studies. Lastly, is it the professional man or the man of business? Once more, No, for to him galleries of art are sources of elevating ideas, soothers of wearing anxieties, at once charming to the eye and reposing to the mind.

I may here mention a useful project formed by the Committee on Education appointed by the Social Science Association. This is to place a certain number of casts from works of art in some one of the public schools in Boston, with a hope that they will aid in that unconscious education of the young in the appreciation of beauty, which is so desirable as directly affecting the future of art in this country. It is precisely at a period of life when the mind is open to every new impression, that we can hope to influence it for good by bringing it within the range of objects calculated to elevate it and to refine the taste; and it is chiefly at those moments when the eye falls unpremeditatedly upon a beautiful thing that it takes hold of us, and makes an enduring impression. The idea of the Committee is novel, and has, so far as we know, never been carried out; but for the reasons above given it recommends itself to those who feel an interest in bringing æsthetic influences to bear upon the rising generation.

In questioning the utility of public art-museums, you question the utility of art (which Lamennais defines as "the reproduction of the divine work under material or durable conditions"); in questioning the utility of art, you question the utility of beauty; and in questioning the utility of beauty, you question the wisdom of the Creator, of whose works it is an essential element.

In nature we find fitness of means to end, harmony in lines and shapes, loveliness in form and color, and the same general perfection, not only in the grandest objects but also in the smallest and

humblest. Go where we will, we find some of these essential elements of beauty. It matters not whether we stand upon the seashore, and look over the boundless waste of waters till our eye meets the horizon, and then travel upwards to the zenith where

"The freighted clouds at anchor lie,"

or sail swiftly onward like the ships below them, till they are lost to sight; whether we wander through green woods of oak and beech, and meadows gay with flowers, and climb the steep mountain-side through solemn forests of pine and hemlock till we reach those upper fields where the Alp-rose blooms and the lichen-covered rock stands like a boundary-stone upon the limits of eternal snow; or whether we cross the great deserts, whose solemn vastness, ever-varying color, and constant repetition of line so strikingly contrast with the aspects of nature to which we have been accustomed, — everywhere we find beauty, and are forced to realize its all-pervading presence.

Now the uses of beauty, like those of its exponent art, are to stimulate the soul, awaken its highest faculties to life, and thus to lead it through the finite to the Infinite. In thus speaking I am not to be supposed to confound the sentiment of beauty with the moral and religious sentiment, and thus make Art the servant of Morality and Religion of which, though distinct and special, it is the noble ally. Beauty in nature causes the naturally devout spirit to glow with gratitude, and may awaken religious instincts in the most careless mind, but its unassisted power can hardly lead man beyond Deism. Over the Greeks, whose primitive religion was a deification of the powers of nature, and whose later creed exalted the human form as the most perfect manifestation of natural beauty, it held absolute sway; in truth the ideal Greek style, which was a *résumé* of the scattered perfections of nature, was a complete embodiment of the Greek religion. But upon modern Christians the religious influence of art is exercised only through its power to raise them into a pure atmosphere favorable for the reception of all high truths.

Did time allow, much might be said as to the possible influence of beauty in art upon the moral nature. When I look upon a great work of art I wonder it should ever be called in question, though I must acknowledge that any such influence must depend upon the moral qualities which its creation has called into exercise in the artist, and upon my capacity to penetrate into the workings of his mind during the process of development from the thought

to the thing. To say that a work of art can make me prudent, temperate, strong under trial, and just, — the four prime requirements of the ancient moral code, — might, if boldly stated, appear absurd, but if I say that in conceiving and working out his idea the artist has exercised the virtues of temperance (which is sobriety), of prudence (which is far-sightedness), of strength under trial (which is fortitude), and of justice (which is rectitude of judgment), and that I have so entered into the result that I have been brought into sympathy with these moral virtues, and am consequently inclined to practice them, my plea for the moral influence of a great work of art is strengthened, if not absolutely justified. The truth of the converse proposition, that art can exercise an absolutely immoral influence, does not need to be demonstrated. It can do so, as all will allow, either through licentious forms, or through those far more dangerous suggestions which weaken the moral sense without shocking the refined taste. Numberless examples, however, prove that a love of art may coexist with moral depravity. There have always been bad men who loved art, and countless good men for whom it had no attraction; but who shall say how many have been checked in the downward road by its salutary influence, or how much worse the bad might have become without it! Indirectly then we may say, beauty is a religious and a moral agent; and if beauty, then art, "which is the homage paid by man to the perfection of God's work." Its utility is then manifest, and the benefits which it bestows upon a nation which feels and appreciates it may thus be summed up: In learning to love art, "the connecting link between nature and the soul, their vital synthesis," we learn to love Him who created the first, and gave us the faculty to conceive the last; we widen the circle of our intellectual pleasures, quicken the better part of our being, and through the contemplation of noble objects fill our minds with elevated thoughts.

The nobler the style of art, the greater will be its effect upon us. It behooves us then to inquire what is the noblest style, why it is so, and where it has been most fully developed. The noblest style is the Ideal. Our English word "ideal" comes from the Greek word εἴδω, which more especially means, to see with the mind's eye, — a definition marking the difference between *realistic art* (which is a more or less absolute rendering attained by the imitative faculties of what the bodily eye sees in nature) and *ideal art*, which is complex, and demands for its realization an exercise of the highest powers of the human mind. Phidias

knew that in the attempt to imitate any individual type he must be outdone by Nature, for however perfect his imitation he could not, like Pygmalion, give his statue life: he therefore set aside many of her perfections as adapted to special ends and consequently not available for his purpose, and strove by generalization to embody in his work the types and essences of visible objects, "applying all the collective harmonies of nature to his forms, all the degrees of correctness scattered through many individuals to his proportions, and giving to each kind of character which he sought to represent the sum of qualities theoretically ascertained to be appropriate to its ideal expression." He was led to this by the nature of his creed. If gods were to be represented in human shape that human shape must be made godlike, and how could this be done? Not, indeed, by reproducing man in his fallen state, but the image of a typic man which he had first formed in his mind. To do this, he was obliged to rise above the individual to the idea of the "genus" man; for his aim was not to produce an unnatural creature, but one superior in quality to that which is seen in nature. The Greek ideal system, which was a generalized theory reduced to practice, did not exclude the idea of nature and truth. On the contrary, this idea considered in its most elevated principle, exists only there.

The mental process which preceded the conception of a great work of art of the ideal school is aptly described in the words which Dio Chrysostom puts into the mouth of Phidias, standing before assembled Greece to explain by what means he had risen to the conception of his colossal statue of Jupiter at Olympia: —

"I sought," he is made to say, "to express through a visible and sensible material the invisible and unattainable Being, and to show Divine Intelligence in a human form as through a transparent vase."

Questioned by Panænus on the same subject, Phidias answered that he had been inspired by these lines of the "Iliad": —

> "He said, and nodded with his shadowy brows,
> Waved on the immortal head the ambrosial locks,
> And all Olympus trembled at his nod."

Cicero thus expresses the Phidian process of conception: —

"According to me, nothing of any kind is so beautiful that it could not be still more beautiful; wherefore it happens that, when we wish to make an image of anything which cannot be seized with eyes or ears or by means of the senses, we conceive it in our minds. We can imagine something more beautiful even than the statues of Phidias, than which nothing

more beautiful ever was seen. For this reason that artist when he wished to represent Jupiter or Minerva, did not take any person as a model, but worked out an ideal of beauty which he had in his mind, and directed his art and his hand to the imitation of it."

In a letter to Baldassare Castiglione, Raphael refers to this "species pulchritudinis in mente," this idea of beauty which he had formed in his mind by study and observation, and which served him as a model. When this great artist realized a Christian ideal in that divine child of the San Sisto Madonna, he, like Phidias, showed divine intelligence shining with a subdued light out of the far-seeing eyes, veiled, but not hidden, like the flame in an alabaster lamp. His mind rose to the ideal type of Him who as He grew was filled with wisdom and the grace of God, and who from his tenderest years bore the stamp of divinity upon his infant brow.

So Michael Angelo, in painting prophets and sibyls upon the ceiling of the Sistine Chapel, worked upon the same Greek system of generalization, and made them typical creatures, in whom all the abstract characteristics and qualities which constitute semi-divine beings were resumed. The all-pervading influence of Neo-Paganism here showed itself in art, as it then did in all other branches of Italian thought. It impelled them to break loose from the conventional traditions which had long fettered their predecessors, and no longer make art a realistic exponent of sentiment at the expense of beauty.

Unlike the religion of the Greeks, which favored the study of the human form to an unparalleled extent and was the life of Hellenic art, primitive Christianity inculcated a contempt for the body, and regarded sculpture as an especially Pagan form of art. Christians long accepted art but as a useful medium for doctrinal instruction, and used it as a means of working upon men's feelings by the realistic representation of the sufferings of saints and martyrs. Under these conditions it was impossible for the artist to rise to the perfect conception of such subjects as the Blessed in Paradise, or the forms of angels and saints. He had neither the mental or technical training, nor the profound knowledge of nature which would have enabled him to attain the ideal through generalization of the real; and though he made his picture precious by the heartfelt sentiment and fervid piety which he expressed in it, it was weak as a work of art, and as an ideal realization in every way inferior to the antique. Still he had a religious ideal expressible in art, which painters like Fra Angelico attained as far

as their imperfect training would allow, and to which later artists like Raphael and Michael Angelo sometimes rose. Without such an ideal the highest art cannot be developed. Does this ideal still exist? Certainly; for the fundamental relations of man to his Creator and his desires to realize the spiritually perfect in visible shape have not changed: rather it would seem to have gone for a time beyond his reach, perhaps because our more spiritual, less material faith no longer craves its help with the same earnestness as of yore.

The artist has lost one fruitful source of inspiration in losing the feeling that his pictures and statues will be prayed to, and regarded by many as direct agents for the transmission of benefits from heaven to earth. This feeling enabled the mediæval artist to raise his mind to the conception of those divine qualities which faith attributed to the Madonna or saint. Could he have done so, had he known that such masterpieces of religious art as he aimed at painting would be hung upon the walls of galleries, and criticised as coolly as so many Greek gods and goddesses? No: he was thinking not of splendid halls in gorgeous palaces as the setting for his Madonna, or of fashionable loungers and cool critics as her admirers, but of the quiet chapel in the house of God which was to be her shrine, and of the longing, suffering human creatures who would find balm for their wounds in the pitying glance of her heavenly eyes.

Why is it that the religious pictures of Overbeck are cold, and those of Cornelius mannered and lifeless? Why is it that, with the exception of Flandrin working through the old forms, and Scheffer when, as in his Saint Augustine, he represented an emotion with which our human hearts sympathize, and Delaroche in the latter part of his life, no modern French painter has ever succeeded in infusing the slightest religious feeling into his pictures? Why is it that English religious art, if it may be said to exist, is cold and vapid, or so realistic that it fails to move us? Why but because these works of art are neither the product of men trained, like the Greeks, to the realization of a pure ideal, or of artists like those of the Middle Ages, whose works, however incomplete, were born of faith? Modern art does not aim to be the exponent of a religious ideal. Its aims are practical, like those of the century. It deals most successfully with subjects taken from common life, rarely with poetry or history, and produces some good portraits, excellent landscapes, and what are called "tableaux de genre." Its highest avenues for expression seem closed, and its steps uncertain as are

those of one who walks in the dark, now that the steady, far-off light which once guided his footsteps is hidden from view.

But this state is, let us hope, transitional. The human heart, as of yore craves food for the satisfaction of its highest instincts from the never-failing springs of art, and sooner or later will seek, and then surely find, an ideal which will respond to them. Who can say that if the New World will but prepare for that moment by availing herself of those means for art-culture which she has till now neglected, her sons may not at some future day work out for themselves new paths in a realm as boundless as their own wide land?

Let us at least by creating educational museums of art give to them means of forming a standard of taste through knowledge of the masterpieces of the past, believing with Emerson that

> "'Tis the privilege of art
> Thus to play a noble part;
> Man on earth to acclimate,
> Bend the exile to his fate,
> And, moulded of one element
> With the stars and firmament,
> Teach him on these as stairs to climb,
> And live on even terms with Time;
> While upper life the slender rill
> Of human sense doth overfill."

CIVILIZATION AND HEALTH.

Read before the American Social Science Association, at the Lowell Institute, Boston, March 1st, 1870. — By Francis Bacon.

There is a notion which rises sometimes even in thoughtful and educated minds in their dejected moods, and which perpetuates itself as a belief pretty extensively among the unthinking and ignorant, that we are living in times of great physical degeneracy; that the world is in its decay, and that we have had the misfortune to be produced in the decrepitude of Nature. It is suspected by some that the whole creation languishes, and that neither plants nor animals have the bulk or vigor of their ancestors, and that everything is daily sinking by gradual diminution. Though the process of deterioration is thus general, it is considered that in mankind the most striking failure of stature and strength and health and longevity is to be seen, and that this species has no brighter prospect, as things are now moving, than to go the way of those lamented fowls, the Dodo and the Great Auk.

This opinion has the weight of great antiquity. The poetry of all ages is full of it. "These degenerate days" may be fixed, by the authority of contemporary writers, in almost every part of the historic period. Nor is it a fancy of the poets alone, for in what is left to us of the science of ancient Greece and Rome the same notion frequently recurs. I find in an old English author a passage so exactly in point, that I cannot forbear to repeat it here. Dr. John Caius, a very learned man, the first of English physicians three hundred and twenty years ago, is trying to account for the "sweating sickness" of that time, one of the most fearful pestilences that ever visited any people. He says: "We are nowe a daies so unwisely fine, and womanly delicate, ... the olde manly hardness, and stoute courage, and peinfulnes of England is utterly driven awaye; insteade whereof men now a daies receive womanlines, and become nice, not able to withstande a blaste of wynde, or resist a poore fishe. And children be so brought up that if they be not all daie by the fire with a toste and butire, and in their furres, they be straight sick." And he laments that peo-

ple no longer "lyve quietlie, friendlie, and merily one with another, as men were wont to do in the olde worlde, when this countrie was called merye Englande." Yet in spite of these consuming vices, bringing swift destruction with them, that dreadful pest has gone, clean gone, and has been seen no more for these three centuries, and the English people remains — remains to be scolded in the same round terms in this present year of grace; and to listen to tales of the lost prosperity and happiness of some golden age, fixed, if not wholly vague and dateless, in some period when, as Macaulay has said, in a passage familiar to all, "noblemen were destitute of comforts the want of which would be intolerable to a modern footman; when farmers and shopkeepers breakfasted on loaves, the very sight of which would raise a riot in a modern workhouse; when to have a clean shirt once a week was a privilege reserved for the higher class of gentry; when men died faster in the purest country air, than they now die in the most pestilential lanes of our towns; and when men died faster in the lanes of our towns than they now die on the coast of Guiana."

Sagacious minds may have often suspected this cherished grievance of the ages to be an imaginary one, but only in recent times has it been possible to show authoritatively how unfounded it is. The gathering and recording of great masses of facts relating to the duration of human life is a modern practice. There is no continuous record of this sort running back quite four hundred years. The well-known and often quoted Geneva records are the oldest that we have. No one, probably, can see the result of those records stated for the first time without a sense of astonishment. They show us that in a period of three hundred years, the average term of life was lengthened from 21.21 years to 40.68 years, an increase of almost 100 per cent. So surprising a statement as this might well be received with suspicion, were it not that all the evidence that we have (and of later years it has accumulated enormously and with extreme particularity of detail) goes to corroborate it. The temptation is strong to set before you some of the impressive arithmetic of the subject, and leave it there, but "the eloquence of figures" addresses itself rather to sight than to hearing; and, besides, many of you must have seen a statement of the facts, at once full and exact, given in an article in late numbers of the "Atlantic Monthly."[1] In short, we know that the expectation of life for those born in Christendom is greater now than

[1] "The Increase of Human Life," by Dr. Edward Jarvis. *Atlantic Monthly*, October, November, and December, 1869.

ever before since history began to be written; that life is better worth having now than ever before; that it is more respected, more fenced about with all safeguards of law, more secure. The growing reluctance to inflict death as a penalty, is a single indication of this fact. So, more indirectly, is the growing intolerance of the existence of bodily pain. Where now could spectators be found for an *auto da fe*, or a crowd of connoisseurs of the torture-chamber? Since the divine discovery of anæsthesia has shown us that the worst and most hopeless of pains are unnecessary and preventable, we have had some education in this regard. It is still too early to estimate in full the moral effects of that discovery, nor is this the place to do it, but I shall scarcely be called fanciful for this suggestion of their importance.

Admitting then, as we must, this steady increase in the term of human life coincident with the progress of our civilization, it becomes us to know something in detail of the influences which have proved thus kindly and fostering. Can we simply say that all the new conditions to which man has been subjected in his progress from the primeval state up to the civilization of the present, have been to his advantage? Far from it. Countless myriads of men, some entire races, have been crushed and melted away in the working out of the great problem. "The world," says wise Sir Thomas Browne, "that took but six days to make, is like to take six thousand years to make out, meanwhile old truths voted down begin to resume their places, and new ones arise upon us." It is a slow process, our coming to a perfect understanding with Nature, so that, on the one hand, we take all that she has to give us, and get the good of it, and on the other hand, we do not interfere with her great changeless laws by our little housekeeping arrangements. Whenever we do this latter, whether by blunders in the way of our dwelling, or occupation, or food, or clothing, or medicine, we invariably suffer for it. She will not be defrauded. The history of civilization is a recital of experiments that prove this. The human individual is an infinitely variable quantity, and it takes a great while to complete and determine important experiments upon him; so long sometimes that his own life is too short, and his heirs must carry on the process after him. A much longer period is needed to get the final results of similar experiments upon the human race. Now a steady succession of ever new experiments attends the progress of mankind, not only from absolute barbarism to civilization, but from one degree of civilization to another. When, for instance, the Irish people began to be fed with pure starch,— with

potatoes, — that easily cultivated and prolific root was found to give great returns to the poorest husbandry in the cold and damp soil which had before reluctantly yielded scanty crops of rye and barley. The people soon had a greater bulk of food than ever before to put into their stomachs, and the sense of distension thus produced was satisfactory as replacing habitual emptiness. Population increased, — not uniformly a symptom of prosperity, — and the new and abundant food was regarded as a great boon to the impoverished and ill-fed country. The potato gradually exterminated the grain crop. What the effect was then upon the health of the potato eaters, no one of that age seems to have observed. We know now, for Majendie and Lehmann and Liebig have taught us, that this sort of feeding was no better than disguised starvation; and, more recently, with the introduction of extensive potato culture into new countries, — New Zealand for example, — we have had the opportunity of seeing how certain diseases of mal-nutrition have multiplied there. But the potato speedily became almost the sole food of Ireland, and nobody ventured to speak a disrespectful word of the vegetable, until Wm. Cobbett did, after two centuries of its use; and he was well known for a surly iconoclast and impracticable revolutionist, whom nobody regarded. So the experiment went on, and we know only too well what has come of it thus far. In other countries when wheat has failed, the poor, though sorely pinched, have made shift with barley and rye, and, when these were gone, with buckwheat and roots; but where, in years of plenty, nothing stands between the people and death but the starvation diet of potatoes, what is the alternative when that fails? This is the awful question that has been put again and again to the Irish in successive potato famines, and which, after a despairing attempt at answering it with poor pot-herbs, and dulse and tangle from the sea, they have "given up" by myriads. The potato played this people false, not merely by melting into rottenness beneath their grasp, but, more insidiously, by slowly sapping their physical and perhaps moral powers through generations; so that when the time of stress and struggle came, nothing was left in reserve of strength and courage, and the famine-typhus found them a passive prey.[1] "All analogy," says Dr. Farr, the Registrar-General of England, "proves that no exten-

[1] That saintly man, Father Matthew, said in 1846, "On the 27th July, I passed from Cork to Dublin, and this doomed plant bloomed in all the luxuriance of an abundant harvest. Returning 3d August, I beheld with sorrow one wide waste of putrefying vegetation. In many places the wretched people were seated on the fences of their gardens, wringing their hands and wailing bitterly the destruction that had left them foodless."

sive or permanent degeneration of a race can be accomplished in less than two or three generations. The great change is as slow and insidious as it is certain. It is rarely perceived by its victims, who remain rooted and benumbed on the spot, unless they and the community are aroused by sudden and terrible catastrophes. That angel which it would seem it has pleased the Almighty Creator and Preserver of mankind to charge with this dread mission, is the pestilence. Wherever the human race, yielding to ignorance, indolence, or accident, is in such a situation as to be liable to lose its strength, courage, liberty, wisdom, lofty emotions, the plague, fever, or cholera comes, not committing havoc perpetually, but turning men to destruction, and then suddenly ceasing, that they may consider. As the lost father speaks to the family, and the slight epidemic to the city, so the pestilence speaks to nations, in order that greater calamities than the untimely death of the population may be avoided." We cannot say confidently yet, that we have seen the ultimate result of this potato experiment.

Take an instance, again, in the case of another vegetable unknown to the Old World, American, too, like the potato, but this time a tremendous narcotic.

Tobacco has been a factor in our civilization for about as long a time as the potato. Precisely what it has done to the human race, we are not yet authorized to say. Some of its effects are very subtle; but that it has had some great influence seems clear enough. When it is taken for the first time in a considerable dose, it produces symptoms which need not be described here, but of which we may safely say, that no physician could see them originating in any case without alarm, if ignorant of the cause producing them; and, having such properties, this drug is consumed by the human family at the estimated rate of nearly one thousand millions of pounds a year. Its effects cannot fail to have been great, however uncertain, and we have some good reasons for believing that in many cases they outlast the life of the individual in whom they are first manifested; that, for instance, what is impaired assimilation in the parent is arrested or perverted development in the child, — that nervous irritability and hypochondria in the one becomes paralysis and insanity in the other; and, in short, that this tobacco experiment is one of those already spoken of, that cannot be carried through in a single individual or a single generation. Undoubtedly posterity will know more about it than we do, and perhaps will wonder at our ignorance of what to them will be palpable facts.

Then, again, there are coffee and tea, still newer to our use. In the year 1610, Master George Sandys saw with astonishment in Constantinople the Turks "sitting most of the day and sipping of a drink called coffa (of the berry that it is made of) in little china dishes, as hot as they can suffer it, blacke as soote, and tasting not much unlike it, which helpeth, as they say, digestion, and procureth alacrity." And this, he speculates, is the genuine "blacke broth" of the old Spartans. In 1652 the first little parcel of it was brought to London and used. This present year, it is calculated, in Europe and America, something like one hundred and fifty thousand tons is consumed (three hundred million pounds). September 25, 1661, the worthy Mr. Pepys, a great fancier of novelties, makes the important entry in his diary: "I did send for a cup of tea, a China drink, of which I have never drank before." At the beginning of the last century the entire annual use of this "China drink," in Europe and America, did not amount to five hundred thousand pounds. Now it exceeds fifty millions. This is a wonderful change effected in the diet of Christendom; a change not without potent and permanent results in the physical nature of man. Whether any of these are seen in the apparent increase of certain forms of nerve disorders is as yet mere matter of conjecture, concerning which much pigeon-holing of statistics remains to be done, before it can be admitted even as a substantial opinion. It is held by some of the most judicious observers that these "subsidiary foods," as they have been called, have done a real service to modern civilization by enabling the performance of forced labor, and the support of undue fatigue, and increasing the vital resistance to morbific poisons; to say nothing of the view ingeniously urged by Lecky and others, that by "checking the boisterous revels that had once been universal, and raising woman to a new position in the domestic circle, they have contributed very largely to refine manners, to introduce a new order of tastes, and to soften and improve the character of men."

The steadily increasing list of diseases of artificers, inconsiderable as the numbers may be that suffer from each one, is a perpetual reminder to us to keep our petty plans properly subordinated to the laws of Nature. We liberate the imprisoned powers of Nature, her phosphorus, her mercury, her arsenic, and press them into our service: they turn upon us and take toll of our blood and bones. Curiously minute is the subdivision of these diseases; curiously exact their apportionment. The silk-weavers have theirs, there is another for the linen-weavers, and another for the

cotton-weavers; painters have their sort of palsy and neuralgia, and type-setters theirs, and mirror-silverers theirs. The percussion-cap maker breaks out with certain eruptions, the match-dipper loses his jaw-bones. The blue dyer goes mad in one way, and the scarlet dyer in another, if we take Esquirol's word for it. Even that little toy-balloon, which is a new delight of childhood, could not be invented and made without giving us a new disease in the persons of the makers.

Time scarcely suffices even to hint at the effects upon mankind of the use of glass in building. This is assuredly entitled to rank among the greatest of the sort of experiments which we are considering. The ingenious statement has been made that we have no natural grown men now: that, like unseasonable lettuces, they are all raised under glass. The alternative, however, is not between glass and open air, as this statement would suggest, but between good shelter with light and possible cleanliness, on the one hand, and bad shelter with darkness and inevitable filth on the other hand, as one need not travel many miles in the south of Ireland to find out. Even so far as the admission of air is concerned, we find practically that ventilation is better where plenty of glass is used in building, however tight the walls may be, than when it is left to chance filtration through the chinks of a mud hut. The increased cheapness of glass is one of the great material gains of our time. The repeal of the English window-tax marks a distinct advance in the hygienic state of the English poor. If in the corn-laws the king came between the poor man and his bread, no less in the window-tax did he stand between him and the light of heaven; and so long as that statute endured, the subject might, without affectation or cynicism, urge the request of Diogenes to Alexander.

In casting about for the causes which have produced the extension of human life, we are struck with the fact that some destructive agencies which make a great figure in history have been of variable activity, and that some have either for a long time completely disappeared, or have been restricted within much narrower limits. Not to mention other ancient pestilences, of which the imperfect descriptions left to us only permit us to say that they were of enormous fatality, there are three great diseases, once of wide prevalence and of conspicuous destructiveness, — the oriental plague, the scurvy, and the small-pox, — which have been comparatively recently relegated to the past, so far as the best civilization of Christendom is concerned. What is the practical significance

of this statement, to our own chances of life and health? It is hard for us fully to realize; we strain our minds in the attempt. It is easy to repeat the statistics of destruction, but few of us, I think, have the power to assimilate figures and convert them into emotions, as Defoe has done in his History of the Plague in London. I repeat some numerical statements of the ravages of the plague in Europe, taking by preference the more moderate, for the highest surpass our power of belief. When it appeared under the name of the "Black Death," in the middle of the 14th century, giving signs of peculiar malignity, it swept in about four years almost completely over the Continent, and destroyed, it is estimated, one fourth of the inhabitants. Venice lost one hundred thousand of her people; Florence, sixty thousand; Siena, seventy thousand; Avignon, sixty thousand; London, one hundred thousand; Norwich, fifty-one thousand; and this mortality, in each case, was usually produced within a year, sometimes in a few months. Though committing its most dreadful ravages among dense masses of population in the cities, the plague was by no means restricted to them; it spread through the open country as well, almost depopulating wide districts. The foundations of civil order were shaken; property was abandoned, inheritance was forgotten, ungathered harvests perished in the fields, ownerless herds died of starvation, ships with crews of corpses drifted through the Mediterranean, and thus famine was added to the pestilence. Though this destruction has never since been paralleled, the poison of the plague remained domesticated in many of the cities of Western Europe for centuries, not continually active, but always ready for favoring circumstances, and bursting out in virulent epidemics, at intervals of a few years. Just two hundred and five years ago, it slew in one year in the London of that time, — not a third of her present size, — sixty-eight thousand five hundred and twenty-six persons, and then disappeared completely, and has scarcely been seen since in Christendom. How should we feel, — how beyond all expression would our horror and consternation be, — if, here in Boston, in the coming four or six months, fifty thousand people should die of one disorder? And yet to have the plague in a city in the Middle Ages meant just this: and such a loss of life implied more misery to the survivors and a greater interference with industry and social order than it would with us, because our municipal organization is higher, our sources of supply vastly greater, more varied, and more accessible, and our power of repair of social damages more active.

I mentioned the scurvy as second of these obsolete diseases. It

is a curiosity to us nowadays; many physicians have never seen a case, and it has scarcely a foothold left anywhere, except on shipboard in voyages of unusual length and hardship, or in an ill-provisioned army, far from its base of supplies, or in some Gehenna of an Andersonville, or a Belle Isle. But "during the 16th, 17th, and earlier part of the 18th century, the disease was endemic in towns, fortifications, camps, and armies." "Many thousands were often cut off within a few months in single armies and garrisons; and it is probable that more seamen perished from scurvy alone than from all other causes combined, whether sickness, tempest, or battle." Take almost any voyage at random out of Hakluyt or Purchas, as a specimen of what those old sailors had to suffer in this way. Vasco da Gama, in doubling the Cape of Good Hope, lost one hundred out of his crew of one hundred and sixty. Jacques Cartier, in sailing to Newfoundland, had at the last only three sound men left among his one hundred and ten. Drake, and Cavendish, and Hawkins, and Anson, and all that glorious company, have the same dismal story to tell; but Cook, who sailed a little later, when men had grown wiser, brought home, after a three years' voyage, a healthy crew, which, out of one hundred and twelve, had lost only one by disease. We know perfectly well now what all this history of destruction meant — that it was simply bad, ignorant, careless feeding. We know that a nation without a kitchen garden, like the English nation up to the reign of Henry VIII., must be consumed with scurvy.

Everybody knows that the small-pox has greatly abated since the present century began, and everybody knows how that abatement has been effected. The majority of those who are enjoying the immunity which vaccination confers know that small-pox is an odious and troublesome nuisance, but very few of them know fully from what they have been saved, and how inadequate any gratitude of theirs must be. We have got some idea of what the plague used to be: the small-pox was worse! It was "the most formidable and fatal of all the diseases that afflicted mankind," say the cool statists. Its average annual death-rate, seventy years ago, in countries where it was most closely observed, was about three thousand to the million of population, and nearly one tenth of all who died, died from this disease. This would be at the rate, in Great Britain, at present, of more than sixty thousand deaths a year from small-pox. Many who did not die outright from it never recovered from its virulence, but were blinded, or deafened, or crippled, or thrown into lingering and fatal disorders. No watchful-

ness could guard against the infection, no bodily strength could resist it. The many centuries of its prevalence had not mitigated its baleful strength, nor impaired its power of propagating itself. Mankind lay an absolutely helpless prey before it, until Dr. Jenner, a name never to be pronounced without admiration and gratitude, introduced his wonderful discovery of vaccination. What have been the results of that? It has failed thus far, owing to the ignorance and slothfulness of men, to accomplish what Jenner devoutly believed it would, — the extermination of small-pox from civilized society. We find, alas, that, upon the voluntary system, "vaccination can be maintained only by having small-pox constantly before our eyes." Where vaccination has been compulsory and thorough, we find such facts as these, which might be accumulated to almost any extent. "In Copenhagen, in twelve years before the introduction of vaccination, fifty-five hundred persons died of small-pox; from the year 1802 to 1818, a period of sixteen years after vaccination had been made compulsory, only one hundred and fifty-eight persons died of small-pox over the whole kingdom of Denmark," out of a population of two millions and a half. In England alone, at the present time, fifty-six thousand lives are saved by vaccination each year. In view of such results as these, and of the devoted and unstinted labor that produced them, well might Mr. Coleridge exclaim: "Pronounce meditatively the name of Jenner, and ask, 'What might we not hope, what need we deem unattainable, if all the time, the effort, the skill which we waste in making ourselves miserable through vice or error, and vicious through misery, were embodied and marshaled to a systematic war against the existing evils of nature?'"

Besides these three great destroyers of man, which have thus abated, there are certain other diseases which, under the influence of improved modes of life, of increased medical skill, and of efficient preventive measures, have lost something of their ancient virulence, and no longer swell the bills of mortality as before. The list of diseases recognized as preventable, — diseases which some time it will be disgraceful to have prevailing epidemically among us, — is continually lengthening with the progress of inquiry into their causes; and the recent labors of your own Bowditch go far to add another, and one of the most intractable and destructive of all, to that list.

Almost all those features that go to make the distinction of a modern city from an ancient one, are changes in the interest of health. The ancient city was a low and simple organization.

Like one of those microscopic monsters whose only function seems to be to swallow what is next to it, it took in everything, and gave out nothing. The ancient cities and towns were fortresses, too, often having for their nucleus some still more ancient castle, built in a position naturally strong against an enemy but otherwise most inconvenient for human residence. The chief condition of continuance for the thorp thus huddled together was to surround itself with a high, unbroken wall of strong masonry, lest it should be swept out of existence in a day by some enemy. The space thus fenced in would, in the usual course of affairs, become constantly more and more densely packed. Light and air were the costliest of luxuries. Streets were by preference narrow and crooked, as a defense against arrows and other missiles; sewerage generally unknown; water supply commonly scanty, but perhaps sufficient for the limited use made of that fluid. Houses might crowd against each other, and encroach upon the streets, and throw out overhanging balconies and oriels and turrets, and rise to the height of a dozen stories, until the threadlike alleys below were completely shut in from sunlight. But with the city wall once built, no lateral expansion was possible for generations, or perhaps for centuries. The traveller still finds here and there a fragment left of such a city, towering grim and black, swarming with human life as with vermin, and oppressing the senses like a nightmare. These were the haunts of the mediæval pestilences. When fairs and festivals drew the people of the country within the walls for a while, or when the invasion of an enemy drove them there in hurrying and terrified masses, the accumulated materials of disease fermented and exploded in epidemics, destroying burgher and peasant alike. So it was at Jerusalem, when Titus penned up within its walls more than a million of people. Mannæus, son of Lazarus, did not stay to see the end, nor even the height of the pestilence, but fled to the besieging Romans when he had counted 115,880 dead brought out to be cast down through *one* gate, which he had kept from April to July. This was time of war and of unparalleled destruction, but even in peace and prosperity, in some, and probably in most, of these old cities, men died faster than they were born, and it was only by continuous absorption from without that the city could grow or even continue. Every city that dates its origin even a few centuries back has to struggle against this original vice of conformation. When, after a long period of prosperity and freedom from fear of invasion, the grim old city wall comes down which has so long shut in the people from the sight

of the open fields, and shut out the free breezes and the sunlight from the streets and houses, it not only illustrates the disappearance of the old conditions of civic life and the progress of new ideas, but it makes a blessed epoch in the sanitary state of the old intramural city. The engorged mass of humanity in the centre begins to stir, and to disperse at its edges into the belt of gardens beyond the old wall. The worst of the swarming old houses come down, the narrow and crooked streets slowly widen and straighten, and the sunlight, first and most genuine of disinfectants, strikes in for the first time in a thousand years. "Ring out," says Mr. Tennyson to the Christmas bells,

"Ring out old shapes of foul disease,"

but there are some of these shapes that should appropriately take their leave to a salvo of improved artillery. The first flash of Friar Bacon's explosive announced the disappearance of the walled cities of the old time, more remotely but none the less surely than the blast of Joshua's trumpets did the fall of Jericho. The old frowning battlements have given place to trim green earthworks, as daintily kept as a flower-garden, and, in time of peace, as free from all suspicion of danger.

Many, indeed most of our American cities are free from those faults of plan and structure which we see more ancient towns retaining as their inheritance from obsolete forms of civic life. Sooth to say, the spectacle of avenues and boulevards surpassing in grandeur those of modern Paris, staked out upon an otherwise unbroken prairie, with a place here for a university and there for a grand opera-house, and so on, has provoked unseemly levity on the part of the censorious traveler. And yet the want of some such happy union of the prophetic with the practical, has been the source of unnumbered inconveniences and detriments to the older communities.

Our American towns have their own peculiar obstacles to overcome in their progress toward that ideal low death-rate, which should be the ambition of every good citizen. The shameful recklessness of those who make haste to be rich, — a larger class here than elsewhere, — and that fatal and benumbing faith in the inherent tendency of all sorts of social mischiefs to turn good of themselves, which almost seems a national vice, are but two of these obstacles. The great American cities have had, besides, a very difficult and nearly unique problem set for them to solve, namely, to receive and to assimilate great hordes of people who are, in the first place, new to the climate, and liable to some special

dangers on that score (for acclimation is needed from east to west, as well as from north to south); who are, secondly, unused to and ignorant of the conditions of city life, and have neither acquired in their own persons, nor inherited at their birth, that kind of assuetude to those artificial conditions which is in itself a partial protection against their ill effects; and who are, thirdly, to a very great extent, bad representatives of even the low form of civilization which has originated them, and who are not easily weaned from all the vices of ignorance and habitual dependence. Thousands of people come annually into all our great cities, bringing with them the rude, ignorant, uncleanly habits, the ineptitude of learning new ways, the impatience of restrictions, the inflexibility of temperament, and, I will add, the low vitality, which belong to simple forms of pastoral and agricultural life. All their lives long they have been taken care of after a fashion, work has been provided for them, and they have been set to do it; they have never learned the lesson of independence. So the virgin forest and the unbroken soil of the prairie call to them in vain; they *will* swarm in where population is already thickest, crowd the rats out of the vilest cellars, and run up the majorities for ruffian aldermen and the class *zymotici* in the mortuary reports, in a way that makes shallow people who write for the English newspapers wonder at the degeneracy of the *American* people. Nowhere out of this country does this incubus so crush and throttle civic life; but even in English cities the name of "Irish quarter" is a synonym for filth and disease.

In the history of almost every considerable modern town, there comes a critical and dangerous period. It has ceased to be a rural community, its population has become close, perhaps even crowded; but those public works, and that strict police, and that sense of individual responsibility in the people, which are indispensable conditions of civic welfare, have not yet been established. The ample gardens which the elder citizens remember as once surrounding every house, have been divided and subdivided into narrow lots, and each lot has its buildings. Successive series of sinks and cess-pools have been used until the saturated earth about them would no longer imbibe their contents; then they have been abandoned and forgotten, and again new ones have been made. Complaints begin to be heard, perhaps, about the once excellent water of the wells. The tea-kettle gets incrusted in an unsightly way after a few days' boiling, and the soap curdles in the wash-tub. But this does not of necessity happen either, for

water sometimes becomes most dangerously polluted and yet remains clear, sparkling, and inoffensive to any of the senses. Thus, recently, at Bedford, England, Professor Miller found the very porous, gravelly subsoil completely honey-combed with alternate wells and cess-pools, the contents of each rising and falling with the level of the adjacent river, while the people continued to enjoy their excellent well-water, and wondered why they should die so with the typhoid fever. Some new comer in our thriving town tries to dig a new well for his house, and in the attempt opens into some ancestral cess-pool. If he is one of those irritable and implacable spirits, who are the ferment and purification of small and sluggish communities, he moves in a spasm of disgust to have some distant water brought for the supply of the town, gets it analyzed and declared purer than Croton or Cochituate (in every case, so far as I have observed), and carries his point at last, to the great indignation of the old inhabitants, who declare that the longevity of their fathers, who drank that well-water before them, was unparalleled, that they themselves have had time in sixty years' use of it to find out if it was bad, and that, aqueduct or no aqueduct, they will drink it while they live.

About this time there comes some sudden outburst of typhoid fever, or of intractable dysentery, the like of which the town has never known before. The water-works party, who have expected their achievement to be nothing short of the regeneration of the town, are dismayed; their conservative antagonists have at least the melancholy satisfaction peculiar to the conservative mind under such circumstances. Some clever man with a turn for investigation takes up the case, and finds that a river has been brought into the town, and distributed over and into the soil without any arrangements for carrying it out again; that the mass of organic waste matter which has slowly infiltrated into the earth during many years, has been quickened to pernicious activity by the saturation of that earth with moisture; that some of those who have discontinued the use of their wells have calmly turned the waste-pipes of their houses into them, to the certain empoisonment of their conservative neighbors, who won't use the aqueduct water. And, while he is in the way of investigating, he looks a little further, and he finds a good many pigs stied in the thick of the town, and some shocking performances in and about two or three rival slaughter-houses; and in some of the oldest and shabbiest houses, which have light and air shut out from them by later and loftier erections, he finds that the poor foreign people who work in

the mills and on the railroad have got up a surprisingly close imitation of the sixth ward in New York. And if he goes into the schools and looks at the childrens' arms, he will be sure to find a large proportion of them unvaccinated, and the pabulum for another pestilence thus kept ready for it whenever chance shall bring it that way. And he will find that all these things are, and are steadily accumulating and intensifying because, as the people say, the town is a small place, and is not to be governed by the same restrictions that are necessary in great cities. "Are we a sea or a whale that thou settest a watch over us?" O the struggles before this town can get itself sewered! O the next to impossibility of making householders use the sewers when they are laid! O the internecine strife over the slaughter-houses! O the heart-burnings upon the pig question! Each one of the butchers is a selectman, several of the pig proprietors are deacons, and all are voters. What Spartan standing at bay for the dung-hills! What fervor of eloquence about natural rights and oppressive legislation! Our hardy reformers find themselves face to face with a desperate banditti, contesting every inch of the ground; not those wild fellows with sugar-loaf hats and cocks'-plumes, the terror of Italian roadsides and the delight of romantic childhood, Beppo, Tonio, Rinaldo, and all the names ending in *o;* but those others with names beginning with a great O, the less picturesque, but more formidable brigands of our own back alleys. This most persuasive dysentery, this thrice cogent typhoid fever must come again and again before their solicitations are fully heeded. It is the order of these divine messengers to make "not a perpetual havoc, but to turn men to destruction, and then suddenly to cease, that they may consider."

The case that I have put is not an imaginary one. Just such cases are presented frequently to students of the public health, with details most curious, varied, and instructive. At this moment there are, within cannon-shot of New York, two suburban villages, lovely for situation, conspicuous for their semi-rural beauty, skirted with princely villas, and intersected with ranges of comfortable and even elegant houses, whose annual death-rate is exceeded only by the very worst parts of the neighboring metropolis. In England the keen-scented inspectors to Her Majesty's Privy Council find the most exemplary collections of filth, the most incredible overcrowding, and consequently the most startling explosions of certain epidemics, not in London, nor Manchester, nor even in ill-famed Liverpool, but here and there in neglected towns of moderate size,

and even in little agricultural hamlets. In Greenock, for instance, eight years ago, they looked into the lodging-places of about four thousand working people, not selecting the worst localities, but taking a fair average, and they found that three quarters of these people "were living under conditions which could not be permitted in the worst parts of London." In London, a space of four hundred cubic feet has come to be recognized as the minimum allowance for each human being, and anything less is called intolerable. But here many were living day and night, in less than one hundred cubic feet, and some "in a space about the size of a street cab apiece," without the freedom of ventilation which that vehicle possesses. "After what has been said as to the construction of houses, the crowding of rooms, the general dirtiness and the retention of foul matters, the statement is almost superfluous that in every poor man's room in Greenock the atmosphere is fetid, the singular variety of stench being as remarkable as its general intensity," observes the inspector, and he is a connoisseur of stenches. What wonder either, that two destructive fevers — typhus and typhoid — were thoroughly domesticated there? What inhabitant had a better right? It was noticeable here that the over-crowding in Greenock was not only among the vicious or the utterly poor, but that industrious and well paid workmen occupied these dens and paid high rent for them in the absence of any better lodgment. Well may Mr. Simon, the medical officer of Her Majesty's Privy Council, stop amid his labors to heave a sigh and to remark: "Though my official point of view is one exclusively physical, common humanity requires that the other aspect of this evil should not be ignored. For where overcrowding exists in its sanitary sense, almost always it exists even more perniciously in certain moral senses. In its higher degrees it almost necessarily involves such negation of all delicacy, such unclean confusion . . . as is rather bestial than human. To be subject to these influences is a degradation which must become deeper and deeper for those on whom it continues to work. To children who are born under its curse it must often be a very baptism into infamy. And beyond measure hopeless is the wish that persons thus circumstanced should ever in other respects aspire to that atmosphere of civilization which has its essence in physical and moral cleanliness, and enhances the self-respect which it betokens."

Take another case, still more strikingly illustrative of the point that I make. Three years ago, in the little strictly agricultural village of Terling, in Essex, numbering only nine hundred inhab-

itants, in two months' time three hundred people sickened with typhoid fever, and forty-one of them died. "That is to say, the one preventable disease killed in that short time a larger proportion of the population than all causes of death put together ought to have killed there in two years." Any expert knows full well what he may expect to find when such a case as this is reported. There was a miserably lodged and shamefully overcrowded people, living amid piles of filth upon a spongy soil saturated with filth, and drawing their water from wells sunk in that soil. All causes, all fostering conditions of that great disease of crowd and filth, were as strongly focussed in this hamlet as they could possibly be in the heart of the greatest city.

Sometimes, indeed not unfrequently, we see the same causes operating with equal intensity on a still smaller scale. Some lonely farm-house, or some villa standing in the midst of its own grounds, has half its inmates stricken with fever, and investigation reveals some unsuspected domestic depot of contamination which has escaped from its bounds, or has had its fatal energies roused by some chemical or organic stimulus. We have constantly in our blood poisons which will first benumb, and shortly slay us outright if we do not get rid of them; and after we are free of them, they may do a like mischief to other people unless they are set to do something else, and are thus deprived of their harmfulness. As we have already seen, it is not only when men are massed in great numbers that they suffer more or less directly from the effect of these poisons. Nor, on the other hand, is it inevitable, when they are thus massed, as in great cities, that they should suffer from these effects. Some large districts in London, some considerable districts even in New York, show a death-rate scarcely exceeding that of the most salubrious rural districts. It is clear that the great city of the future is to be a place where life is as long and as secure as anywhere else, and where physical development and health is as great in degree, however it may differ in kind, from that of the agricultural regions.

For to be in health does not imply a certain definite amount of muscular development, or a fixed degree of activity of the digestive or assimilative functions. Economically viewed, health is that state in which a person exists fully able, without suffering, to do what he has to do. There are various sorts of being in health, and each sort has its special usefulness. The plough-boy would not be helped in his vocation by having the brain and nerves of Emerson, nor does the poet need the brute muscularity of Heenan. Lord Brougham

and Mr. Gladstone, Graf von Bismarck and Count Cavour, Mr. Webster and Mr. Stanton, these men all astonish us with their endurance and power of labor through days and sleepless nights, year in, year out. But give any one of them Patrick's day's work of turf-cutting to do, and his mess of potatoes to do it on, or put him at Hans' plough-tail with the customary black crag of pumpernickel as a basis of operations, or let him take his turn with Sambo at the morning hoe-cake and the day-long swing of the cotton-hoe, and any one of those *adscripti glebæ* would leave him out of sight in the second hour. No — these men have served to them the choicest cuts from the stalled ox, fishes from the deep sea five hundred miles away, game from the distant mountains, fruit and vegetables from the forcing-house, tea and coffee from the antipodes, wine that has twice doubled the Cape, and nothing of all this is idle excess. It is all pure use. The mountainous accumulation of business, the watchful hostility of the opposition, the apathy and hesitation of friends, these are to them what the sight of the familiar course is to the thorough-bred race-horse, a stimulus and an added power. But take any one of that other set of workers and increase his daily toil by a fraction, and add to that toil anxiety, and harry his nights with unrest, and what comes of it? Very shortly, what we have seen come to an over-driven and abused ox, a creature patient and enduring up to a certain point, but slow and not to be hurried; he shows first, by irrational but most pathetic signs, that he vaguely feels that everything is wrong, and then, after a brief fury, he breaks down completely and hopelessly, and there is no rallying his broken forces.

I have taken extreme cases, by way of illustration, but there are infinite gradations between. Probably every medical officer of much experience in the late war had frequent occasion to observe, on a great scale, how huge-limbed and innocent-faced giants from the forests of Maine and the wheat-lands of the West would peak and pine, and give way to homesickness and the chronic ailments of the camp, and be overdone with picket-duty at night, and break down upon forced marches; while men of less bulk and stature and of paler skins, skilled workmen from factories, mechanics, and even clerks from the large towns, would take the same unaccustomed tasks with a cheerful alacrity, and endure them with hardihood, seeming none the worse for them when they were finished, but "coming up smiling" at the end, to use the expressive phrase of the prize-ring. The common opinion is that the quietude of an agricultural life, its freedom from civic turmoil, are peculiarly favor-

able to mental health and serenity, and that it is in the stir and uproar of cities that men lose their wits. Study the records of our insane asylums, and see how far the reverse of this is true, and how wisely Goethe spoke when he said that nothing brings us nearer insanity than holding ourselves aloof from others; and nothing preserves the even tenor of the understanding so well as a general intercourse with many people. And yet we are in the way of saying that the lumberman and the farm-laborer live natural lives, and that the town-dwellers live artificial lives. But there is as much idle and delusive talk about natural and unnatural modes of life as we have seen there is about health. It is natural for man, is it not, to gather food and to store it away, and to cook it with fire, and to season it with grateful condiments, — to collect a vast variety of substances for clothing and for ornament, and to fabricate and wear them, — to build a covert against the weather, and then a more comfortable and enduring dwelling, and then perhaps a mansion of splendor and delight, — to find out laws and govern himself by them, to surround himself with safety and strength and beauty.

What we call our sense of comfort is, when unperverted, simply our instinctive appreciation of those things and conditions which are most suitable for us, most conducive to our bodily welfare. Comforts are added strengths. The etymology of the word "comfort" hints at its true physiological significance; a significance which we cannot afford to overlook — an ascetic contempt of which, originating in ignorance and morbid conceit, and formulating itself in eccentric systems of dietetics and regimen, has at times wrought great mischief, and nowhere, perhaps, more conspicuously in our own time, than here in New England. The school-boy Shelley may declaim against the cooking of food, and Rousseau may denounce the brutality of eating meat, and we can still enjoy the poetry of one and the speculations of the other; but when pretended teachers, with nothing of Shelley except his greensickness and his inexperience, and nothing of Rousseau but his audacity, delude ignorant youth into dyspepsia and consumption, it is time to interfere.

These cities of the future, with sunlight and fresh air and pure water coming to every citizen; with no man standing in his neighbor's way; with no noisome or pernicious occupation suffered within their limits; with all rain-fall and water-waste carried quickly away to the unharmed river, while all other refuse, at once more dangerous and valuable, goes with due dispatch to the hungry

soil; with order and cleanliness and beauty in all the streets; with preventable diseases prevented; and with inevitable ones skillfully cared for; with the vigilant government that does not stand apart and look coldly at ruthless greed and needy ignorance, and utter only an indifferent "Caveat emptor," but says to the butcher, "This trichinous pork, this pathological beef, goes to the rendering-vat, and not into the mouths of my children;" and to the brewer, "Burn this cocculus indicus and lobelia, and let me see no bitter but hops hereafter;" and to the apothecary, "Successor of Herod, you shall not poison my infants at wholesale with your narcotic 'soothing syrups;'" and to the water company, "Your reservoir shows foulness this week to my microscope and my test-tube: let it continue at your peril," — these cities of the minimum death-rate, shall they not be our cities? Are these things of impracticable costliness, say you? Nothing is so cheap as health; it is the truest economy; it is cheaper — than dirt. "Dirt cheap" — what an abuse of language! Dirt means waste and disease, death, widowhood, orphanage, pauperism, high taxation, costly production. Nothing costs so much. Besides, the objection, even if it were not unfounded, is unworthy. "All parsimony in war is murder," is the judicious maxim of the Maréchal de Belleisle. Not less, I say, when we fight against an impersonal foe of mankind.

THE AMERICAN SYSTEM OF PATENTS.

READ BEFORE THE AMERICAN SOCIAL SCIENCE ASSOCIATION, AT THE LOWELL INSTITUTE, BOSTON, MARCH 4, 1870. — BY SAMUEL AUGUSTUS DUNCAN.

EVERY country in Christendom, with a solitary exception, has at some time had a system of patents, with a view to encouraging the spirit of invention. When our own government was founded, this source of national prosperity was not overlooked. Wisely judged the wise men who framed the fundamental law of the republic, when they incorporated therein a provision conferring authority upon the national legislature "to promote the progress of science and the useful arts, by securing, for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries." No dream could have crossed their minds of the grand material development which the nineteenth century has witnessed under the wizard touch of the awakened genius of invention. And yet, recognizing the right of every man to profit by his own labor, whether of his brain or his hands, they aimed to do an act of simple justice, extending to citizens of the new-born nation that protection which the law of England had long accorded to British subjects.

Conformably with the power conferred by the Constitution, Congress has placed upon the statute book various laws designed to secure to inventors the contemplated protection. The character of these laws, the machinery by which they are executed, the work which they are accomplishing, and the soundness of the policy upon which they rest, may well occupy for an hour the attention of an organization whose researches and discussions eminently deal with the practical, and ignore nothing that touches, intimately or remotely, favorably or otherwise, the welfare of mankind.

The first law relating to patents for inventions was passed by the First Congress, in 1790. This was repealed by the act of 1793; and this, again, with subsequent amendments, was superseded by the legislation of 1836. The act approved July 4, of that year, entitled "An Act to promote the Progress of the Useful Arts," as variously amended and supplemented, forms the basis of our present system of patents. Under the law as it now stands, any person,

whether citizen or alien, who has invented or discovered any *new* and *useful art*, *machine*, *manufacture*, or *composition of matter*, or any new and useful *improvement* on an existing art, machine, manufacture, or composition of matter, is entitled, upon complying with the prescribed conditions, to demand and receive from the government "letters patent" for his invention; this patent being a formal document, carrying the seal of the office whence it issues, signed by the Secretary of the Department of the Interior, and countersigned by the Commissioner of Patents, and conferring upon the inventor, his heirs, administrators, or assigns, the full and exclusive right and liberty of making, constructing, and using the invention for the term of seventeen years, and of vending it to others to be used. Among the conditions precedent to the grant of letters patent are the payment of the prescribed fee; the filing of drawings and a model, when the case admits of such illustration; and the delivery into the Patent Office of a written description of the invention "in such full, clear and exact terms as to enable any person skilled in the art or science to which it relates to make, construct, compound and use the same."

It will be observed that, according to the language of the patent, the holder possesses full and exclusive ownership over the invention during the designated term; and can, if he finds it accordant with his interests or his disposition, persistently refuse to use it himself, or to grant, under any conditions whatever, the right so to do to others. How the patentee proposes to use his peculiar property it is not within the province of the law to inquire. During the term of the grant he has the same absolute control over the invention that he has over the house that shelters him or over the horse in his stable. The policy of the law looks beyond the lifetime of the patent, and beyond the subject matter of any particular grant. It seeks to stimulate invention by the hope of profit from the opportunities which the guaranty of exclusive possession creates; and by placing on deposit in the archives of the government an accurate description of the improved machines and processes thus developed, it secures the knowledge of the same for the use of the nation at large when the patent right shall have expired.

Much has been said about the natural and inherent right of property which every one has in the products of his brain; and it is upon this ground that frequent attempts are made to justify the granting of patents. Wherever thought and time and ingenuity have been expended, and valuable results produced, the full benefits thereof, it is argued, should accrue to him whose brain and

hands have done the work: just as the capitalist possesses full control over his stock dividends and the interest upon his bonds; the farmer over the products of his land; or the laborer over his hard earned daily wages. But it may well be questioned whether this be the correct theory. Man undoubtedly has a natural right to everything of his own creation which at the same time he has the power to monopolize, but only so far and so long as he possesses and exercises this power of personal monopoly. When he calls upon the state to interpose its strong arm for his protection, the state responds only when in its judgment it is for the good of the whole to do so. In things material, as houses and lands and ships and beasts of burden, the world is agreed that society derives advantage from the exclusive ownership of them by individuals. They are capable of individual appropriation. Hence it is that the state recognizes and protects the right of property in them. But ideas are incapable of such appropriation. So long as an idea remains in the breast of him with whom it originated, it is his, because he can control it; when once he communicates it, it is beyond his control forever. Driven from a material possession, a man may recover it by physical force; but recovery of exclusive possession over an idea which has once passed to others, exceeds human power. If there be a natural right of property in ideas, controlling not simply the idea itself while it remains a secret, but all the various embodiments in which it is revealed, why should not that right be held in perpetuity, like property in things material? But against such a proposition the sense of the world revolts. If its adoption were possible, it would check progress forever.

The less difficult theory upon which the patent system is to be sustained, is that the state confers these exclusive privileges as a reward for services rendered. How stands the case between the public and the inventor? The one possesses himself of a valuable secret. He may have reached it by exhaustive processes of experiment, by years of labor, and large expenditure of time and money; or it may have flashed upon him in some happy moment of inspiration, — which, it matters not, for it is the result that the law looks at, not the way in which it was attained. The secret lies buried in the bosom of its possessor; there it may remain forever, and go down with him to the grave. Yet it is a thing of value, and the state, ever jealous for the welfare of its subjects, desires that they may profit by the new discovery. To ask the inventor to part with it without recompense would shock every sentiment of justice; to extort it from him, if this were possible,

would be an act of unwarrantable tyranny. On the other hand, unless the inventor puts his discovery into operation, it is worthless. If he attempts to work it in secret, he incurs the risk of betrayal by some untrustworthy employé. There is, too, the possibility, and in many cases the probability, that others equally ingenious may come upon the same discovery by some independent method. From the guardian state, thus solicitous, but never released from the obligations of honor and justice, to the inventor, thus environed by difficulties that militate against the continued and peaceable possession of his treasure, comes the general proposition: Reveal your secret, yours by such uncertain tenure, and receive in return, under the solemn sanctions of the law, the exclusive use of your discovery for a stated period. If the proposition be accepted, a virtual contract arises, in which valuable considerations pass between the parties thereto: the inventor parting with his secret, and thus surrendering all control over it after a term of years; and the state throwing open its courts to protect the inventor in the rights thus guaranteed him. In the terse language of the present able Commissioner of Patents, we have "a new thought developed, explained, illustrated, put on record for the use of the nation, on the one side; the right to the exclusive benefit of that thought for a limited time, and protection in that right, on the other." This is the patent system.

Invention, as the term is used in the patent laws, is a term difficult of definition. It may, perhaps, be defined, though crudely enough, as the arrangement of the various elements and subdivisions of matter operated upon in new relations to each other, *i. e.* as similar elements and portions have not been combined or arranged before. This is all that man ever does when he invents. He simply rearranges the materials upon which he works; then, by the interposition of a higher power, the subtle forces of nature are brought into action, and the desired results ensue.

Now, in order to support a patent, the fundamental requisite is that there should be *invention:* not merely the making of an individual thing that never had existence before, as in the construction of a house on the plan of one already built (which is imitation, not invention); nor yet mere double use, as if a mill for grinding wheat should for the first time be used for grinding corn; but the arrangement of matter in new relations, so that when the great forces of nature, whether steam, or heat, or gravitation, or electricity, or cohesion, or repulsion, act upon it, either a new effect will ensue, or an old effect be produced by a new mode of operation.

In the case of a given application for a patent, it being primarily decided that there is invention displayed, the questions then to be determined are: Is it new with the applicant? and, Is it useful? To decide these questions correctly is a work of labor and extensive research. It involves an examination of the entire body of American patents, now numbering more than one hundred thousand, a large mass of rejected applications, the patents of foreign countries, numerous text-books, encyclopædias, reports of scientific associations, and a long list of rapidly multiplying scientific and technical journals. Many legal questions also are involved, which require an acquaintance with the entire body of judicial decisions in this branch of jurisprudence.

In conducting this examination, the Commissioner of Patents is aided by a class of subordinates styled examiners, to whom all applications are in the first instance referred. These officers have charge of specific classes, as that of agriculture, steam-engines, calorifics, metallurgy, fine arts, chemical processes, etc.; there being in all thirty-six divisions. As the value of patent property will always largely depend upon the care exercised in the grant of the patent, and as in the great majority of cases patents issue at once upon a favorable judgment by the examiner, it will be seen that this office demands for the proper discharge of its duties special qualifications. The incumbent should bring to it an active and discriminating mind, the power of promptly deciding intricate mechanical, scientific, and legal questions, unflagging industry, and inflexible integrity. It has been said, also, that, in all matters pertaining to his class at least, the examiner should be "a living encyclopædia of science."

From an adverse decision by the primary examiner, the applicant may, if he choose, carry his case before a Board created for this special purpose. If the Board affirm the decision of the lower officer, the case may be taken to the Commissioner in person. From him an appeal lies to one of the justices of the Supreme Court of the District of Columbia. Defeated there, the applicant may still seek relief by due process in a court of equity.

The question of novelty is usually the most difficult, because of the labor required in ascertaining the facts upon which it is to be settled. The question of utility divides into three branches. 1. Is the machine or process operative, *i. e.* theoretically? 2. Is it trivial or frivolous? 3. Is it pernicious? If inoperative, or frivolous, or mischievous, a patent is to be refused; but beyond these inquiries it is not the practice of the Office to go, nor in fact

does the law, as judicially expounded, permit it so to do. It is no ground of objection that the device is inferior to others relating to the same subject. So that it can be used at all, is not trivial, and not in its nature calculated to produce harm to the community at large, it is entitled to protection. A sewing-machine which forms the subject of a patent to-day is far inferior in its performance to one patented yesterday. Yet it does make stitches, and thus produce useful results. It is also unlike all that have preceded it. It must, therefore, receive a patent. Its inferiority may prove an insuperable obstacle to successful competition with its rivals; but this is the risk of the patentee, and upon the chances of it the Office is not competent, either legally or practically, to pronounce.

As an illustration of inventions of a mischievous tendency, reference might be made to a notable case which came before the Office under the administration of Hon. Joseph Holt. The applicant sought a patent for a policeman's club, so constructed that upon releasing a spring a triple row of keen-edged lancets would leap from hidden recesses and mangle the hand of an adversary. The applicant's professed object was to provide policemen with ample means of protection, and yet obviate the necessity of arming them with deadly weapons, so objectionable because so often used with fatal effect in the heat and danger of personal encounter. The Commissioner refused the patent, on the ground that, while the safety of the conservators of the public peace in their conflicts with lawless men was a laudable object, and might be secured by the new implement, yet if transformed to a weapon of offense in the hands of desperadoes, as it inevitably would be, it would be an evil. His decision is a paper of great power, remarkable alike for the eloquence of its diction, the force of its logic, and the emphasis with which he announces the doctrine that "An invention, to be patentable, must not be useful to the few with a chance of its becoming pernicious to the many, but it must clearly appear that in view of the interests of the whole community the good resulting from it would decidedly preponderate over the evil."

A few statistics as to the current business of the Patent Office may not be uninteresting. The whole number of patents issued up to date is one hundred thousand four hundred and eighty-six, while about fifty thousand cases have been rejected. In 1869 the applications numbered nineteen thousand two hundred and seventy-one, and the patents issued thirteen thousand nine hundred and eighty-six. Of these, thirteen thousand four hundred and forty-two were to citizens of the United States, and five hundred and forty-four to

citizens of twenty-seven different foreign countries. To put these patents into print, there is constantly employed at the government printing-office a force of seventeen compositors.

The patents to American citizens were distributed in part as follows: to New England, about twenty per cent., Massachusetts having as her share ten per cent., and Connecticut five; to the Middle States, thirty-six per cent., New York alone receiving twenty-three per cent.; to Ohio and Illinois, seven per cent. each; to California, two per cent.; and to the eleven States that engaged in the Rebellion, but four and one half per cent. Before the war these States, having nearly one fourth of the entire population of the country, had never received a larger proportion of the patents granted in any one year than seven and one half per cent., a fact that speaks volumes in condemnation of the peculiar institution of the South, now happily gone forever, but which, while existing, crippled enterprise, and induced physical and mental stagnation. The above figures show that, while New England receives the largest proportion of patents according to population, invention is still by no means confined to her limits. Wherever in our broad country wants are recognized, whether on the shores of the Atlantic, in the great central valley, or on the Pacific slope, there are the busy mind and the cunning hand at work in efforts to supply it. All classes of society invent, — the farmer, the merchant, the manufacturer, the mechanic, the surgeon, the printer, the sailor, the soldier, the man of science, and the laborer; and all, according to the value of their work, are adding to the enduring prosperity and glory of the land.

Inventions are the most numerous in matters relating to the farm and the household. In a single year, for instance, one hundred and seventy-five patents were granted for washing-machines, one hundred and fifty-one for sewing-machines, one hundred and eighty for churns, one hundred and forty for stoves, two hundred and ten for ploughs, two hundred and twenty for cultivators, seventy-two for corn-planters, one hundred and forty for gates. On the sewing-machine and its attachments there have been issued in this country eleven hundred and twenty patents; nearly four hundred have been granted for modifications of the kerosene burner; and on the simple article of buckles for clothes and harness, from four to five hundred have issued. The extent to which these patented articles are disposed of is surprising. A single sewing-machine company is making three thousand machines per week. Since 1864 there have been about ninety thousand harvesters built annu-

ally; and in 1869 a single establishment manufactured twenty-five thousand. The gimlet-pointed screw has almost entirely superseded the old style of screw; of the more recent form a single firm in England, operating under patents based upon the invention of an American, manufactures one thousand millions per annum.

Invention moves sometimes in great waves, one discovery having a hundred ramifications, and each branch eliciting the earnest thought of many inventive minds. When the worth of petroleum as an illuminator and lubricant became known, instantly a thousand minds were at work devising modes for sinking wells, and pumps for raising the oil, processes for refining it, tanks for storing it, cars for conveying it, lamps in which to burn it, and modes of utilizing it as fuel. In the single matter of raising the oil from the wells, twenty-five persons were before the Office at the same time claiming to be the discoverers of a particular mode. According to the practice prescribed for such cases, they were put into *interference*, and on the presentation of their evidence the patent was awarded to the one who was adjudged to be the first inventor. When the recent velocipede mania took us all off our feet, the examiner in the class of vehicles was nearly overwhelmed with business. In four months' time four hundred and thirty-two applications were received, and two hundred and ninety-one patents granted. As to one element of the machine, there were thirty-three different contemporary claimants. When the Rebellion broke out, the improvements in fire-arms, ordnance, tents, armored vessels, and all the implements of warfare, largely increased. And so the terrible Angola disaster, in 1867, developed many new modes of heating cars; and the recent call of the Post-Office Department for new mail locks has produced a large crop of inventions in this direction.

The expenses of the Patent Office up to the present time have somewhat exceeded five and a half millions of dollars, to which, if there be added the cost of the building itself, not far from five millions of dollars, and the money expended upon the annual Reports, the entire sum will reach perhaps twelve millions of dollars. But what is this compared with the benefit derived by the public from a single invention of real importance? There are perhaps five hundred thousand sewing-machines in use in the country. Ten cents a day would seem an absurdly low estimate of the value of each of these to its owner; and yet even this daily profit would make the aggregate annual gain to the community from this source alone eighteen millions of dollars. It is computed that the saving of grain by the use of threshing-machines in place

of the flail which they have supplanted, is ten millions of bushels annually. Multiply these figures a hundred fold to include the addition to the nation's wealth from improvements in ploughs and reapers and mowers, and engines of every kind; in printing-presses and telegraphs and vulcanized rubber; in mills and planers; in lamps and stoves and boilers and furnaces; in spinning and weaving; and in all the various processes of working the metals, — all of which have derived protection from, and many of which owe their very existence to, the fostering care of our laws, — and who can complain of the cost to the nation of an institution fraught with such unmeasured blessings? Yet a large percentage of the income from fees is to-day actually being diverted from the Patent Office to the general treasury, though every dollar is needed for the fullest development of the patent system. It certainly requires deep insight to discern the wisdom of raising revenue for general purposes by levying extraordinary taxes upon the inventive genius of a people.

The Patent Office building itself is a structure worthy the high mission for which it was erected. It is built of marble, around a quadrangular court, and covers an area of somewhat more than two and one half acres. The style of architecture is Doric. Regarding its unity of design, its magnificent proportions, the purity of its architecture, its symmetry, and its massive grandeur, it must be pronounced one of the very finest of the splendid public buildings for which the national capital is famed. Its spacious saloons, which occupy the entire upper floors, are among the chief attractions of Washington. Here, in glazed cases, classified and chronologically arranged, are deposited the models of inventions filed in the office. These embrace every conceivable matter upon which it is possible for human ingenuity to be exercised; the official index specifying more than five thousand different "*subjects* of invention." Besides these models, the Patent Office is made the custodian of the national library of copyright. Being thus related to both authors and inventors, it has, most happily, been termed "the repository of the crystallized brain of the country."

The distinctive feature of the American system, as compared with the European, is the official inquiry instituted into the character of the invention as regards its alleged novelty and utility. In Europe patents are generally granted upon simple registration. Two or three countries only provide for a preliminary examination; but this is conducted upon such illiberal principles as to amount almost to prohibition. In Prussia, for instance, in 1867 only one hundred and three patents were issued, while in the United States

the number reached thirteen thousand. The patent of registration carries with it no presumption of validity. This remains to be determined by the impoverishing process of litigation. To be sure, an American patent must generally have been sustained by the courts before its validity will be allowed to pass unquestioned by its opponents; but it is at the same time true that the official scrutiny to which it has been subjected secures for it the confidence of the majority of the public.

In the year 1869 twenty-eight per cent. of the applications in this country were rejected for lack of novelty; and of the thirteen thousand nine hundred and eighty-six actually granted, more than twelve thousand were materially modified in their passage through the office, the applicants being required to restrict the untenable claims at first set up. Under a registration system these eighteen thousand rejected and modified applications would have obtained patents with false and deceptive claims; conflicts of interests would have arisen in consequence, litigation largely increased, and public confidence in patent property correspondingly diminished. The recent outcry in England against patents is based largely upon the amount and excessive cost of litigation in this class of causes. The great majority of American patents are beyond doubt good and valid; and by consequence patent property possesses a commercial value in this country that attaches to it nowhere else: and this fact, too, has doubtless contributed largely to induce the liberal policy displayed by our courts in dealing with patent questions; since, in marked contrast to the English practice, they have generally aimed, in accordance with the maxim of interpretation, *ut res magis valeat quam pereat*, to sustain the patent, if not plainly in violation of law.

Another evil of the registration system is that it places the inventor at the mercy of every wealthy corporation interested in the particular manufacture, and of every unscrupulous and swindling speculator. The pirate obtains a conflicting patent; and under cover of this infringement flourishes, while the poor inventor, powerless in the hands of his antagonist, is forced to accept the terms they dictate or look on and see the fruits of his genius and toil sacrificed to the rapacity of wealth and the lust of gain. Or, if unmolested thus, not being able to command the services of a competent professional expert for the thorough examination necessary to bring his claims into strict conformity with the state of the art, a service now performed by the Office upon the payment of the first fee of $15.00, he takes his patent with ill-considered

claims; and it is only after he has invested largely upon the strength of it, and finally goes into court to protect his rights, that he finds to his sorrow that his patent is void, and his business prospects wrecked.

The judgment of an intelligent and competent examiner, even though adverse, is of great value. It saves many a man from the bottomless mire of incautious speculation or the ruinous entanglements of the law. Nor this alone. The battle is not half fought when an invention is made. The more difficult work remains of introducing it to public acquaintance and public favor. The large majority of inventors are poor. It becomes an absolute necessity for them to associate themselves with capitalists, and every obstacle to the largest possible association between the two classes should be removed. But capital is proverbially timid; in nothing, perhaps, more so than in relation to patents. Hence the necessity of making the preliminary examination of the most rigid and thorough character, in order that the patent, when granted, may enter under the most favorable auspices upon its search for that material aid without which so many meritorious inventions languish and die.

That a goodly degree of confidence in American patents exists in this country is evidenced by the enormous trade that is carried on in patent rights. In 1869 there were placed upon record in the Patent Office twelve thousand five hundred and seventy-two assignments of entire or partial interests in patents, to make no mention of the much larger number of licenses and shop-rights which have never been recorded. This extensive traffic, very far exceeding anything to be found in any of the countries of Europe, is a most potent argument in favor of the American system.

It is objected to the examination system that in these days of such rapid multiplication of mechanical and chemical discoveries it is impossible to determine whether the invention may not somewhere in the world have been practiced by another, so that many an improper patent will be granted through official ignorance. Such patents there doubtless are. Man's judgment is always liable to error. Shall we therefore cast down all barriers and flood the country with worthless patents? That would be illogical. By parity of reasoning the abolition of the inferior courts of the country might be urged, because forsooth so many judgments there rendered are reversed by the appellate judicial tribunals.

But it is said that many a deserving claimant is refused a patent, a wrong arising from the impossibility of maintaining a firm standard of originality. These cases sometimes happen, but they are

rare. To obviate this objection an amendment of the law has been suggested, by which a person who persists in his claim, against the adverse judgment of the Office, may receive his patent; the terms of the instrument, however, being so modified as distinctly to indicate that it issues under objections. This would give the patentee a standing in the courts, and at the same time would duly caution the public.

Other amendments of our system have been proposed. Among them may be named the full publication of pending applications with opportunity to all parties interested to appear and show cause why, by reason of prior invention, or of rival claims, or otherwise, the patent prayed for should not issue. This would be a cumbersome and expensive system, and would demand for its execution a much larger working force than that now employed; but, if practicable, it would oftentimes develop important facts not otherwise attainable by the Office. This preliminary quasi-judicial test of the validity of the proposed grant would be of a summary and inexpensive character, as compared with the ordinary protracted litigation in the courts; and, while it would not necessarily prevent subsequent litigation, yet doubtless a patent thus granted in the face of an active partisan opposition would stand upon a much firmer basis than one granted, as now, upon *ex parte* proceedings.

Another proposition is to make the possession of "letters patent" conclusive evidence in court of the plaintiff's right to recover damages for any proved infringement, until the patent itself be set aside by the institution and prosecution to final judgment of a special process for its repeal. This would preclude the defense of invalidity of the patent, now so common in every suit for infringement, and the most fertile source of expense.

Again, the issues presented in the courts often involve such nice and difficult points that it may well be questioned whether juries should not be altogether dispensed with in this class of causes, — the court at the same time being provided with a body of competent scientific experts. The intricate scientific and mechanical questions involved are frequently such as rise entirely above the comprehension of an ordinary jury; and even the courts, not having had special education in this direction, find the aid of expert testimony in some form indispensable. Yet it is far better that this should come from disinterested officers of the court than from men governed by partisan interest, and who make the immutable laws of nature shape themselves according to the fees that have been paid and the party in whose service they are enlisted.

Finally, the term of an American patent is seventeen years. In this might we not learn wisdom from England, where, to perpetuate the patent beyond the third and seventh years respectively, the payment of additional and augmented fees is required? By this provision the worthless patents die at the end of the first term, and only the most valuable pass to a second renewal.

As an auxiliary of the patent system it must be apparent at a glance that some means should exist by which the public may be promptly and fully informed as to the character of the patents issued. This is essential, not only to the inventor, that he may not needlessly expend time and effort upon what has already been brought into existence, but also to the capitalist, that he may act intelligently in investing his money, and to the manufacturer, that he may have at his command a ready means of knowing whether he is infringing upon the exclusive rights guaranteed to another. For the past twenty years this end has been sought in the publication of an annual Report, containing all the claims and an abbreviated and reduced illustration of the drawings of all the patents issued during the year. A large edition, in one year reaching the number of sixty thousand, has hitherto been published for gratuitous distribution. The cost of the Report for 1867, issued in four volumes and an edition of nineteen thousand copies, was in excess of $200,000. This Report is at best an imperfect source of information. It is proposed by the present Commissioner of Patents to substitute for it full duplicate sets of the entire specifications and drawings — in sufficient numbers to be deposited in the capital of each state, in each congressional district, and in every large city. The information thus disseminated would be of a far more exact and reliable character than that now obtained; and if the distribution of copies can be carried far enough, the proposed change will prove a measure of wisdom. Still better results might be expected from the retention of the annual Report in combination with the new plan.

When Congress learns the folly of the "penny wise, pound foolish" policy which fixes the rates of compensation of the public servants, it may be expected that the Patent Office will be among the very first of the departments of the government to reap advantage from the application of more liberal ideas. As already stated, not only is it required of an examiner, for the thorough performance of his peculiar duties, that he be a man of legal mind, if not in fact of legal education, but that he also be an expert in the branch of science or mechanics placed under his supervision, which status is to be attained only by years of patient toil and diligent research.

To this should, if possible, be added a practical business acquaintance with the class of inventions in charge. It is rare indeed that these various qualifications are found combined in the same person. When they are, however, the proffer of more remunerative employment from private parties almost invariably withdraws him from the public service. That man above all others is the one who should be retained in office; and if it were necessary, in order to secure his services permanently, to increase his salary from $2,500 to twice that amount, or even more, it would be a wise expenditure of money, whether viewed with reference to its bearing upon the inventor himself, upon the purchaser of the patent, or upon the community at large. It is a disgrace to any government that it should find itself outbid by individuals, and thus obliged to carry on its operations by temporary and too often inferior officers. As the public service is esteemed the more important and the more honorable, so it should be the best compensated, and thus always able to command the highest talents in the nation.

In these and other respects perhaps the American system can be modified with advantage; but as it stands its vast superiority over the European is so manifest that in England, where widespread discussion upon the proposed entire abolition of patents is rife, the strongest advocates of protection are pointing to our example as suggestive of the true remedy for the acknowledged evils so generally felt in that country and on the continent. In May last a resolution was introduced into the House of Commons by Mr. Macfie to the effect "that in their judgment the time had come when the interests of trade and commerce and the progress of the arts and sciences would be promoted by the abolition of patents for inventions." It was subsequently withdrawn by the mover, but, in the discussion that arose during its pendency Mr. Howard, referring to his visit to America, said that no building in the United States had so impressed him as the patent museum at Washington, and dignified it, most truly, with the name of "a great educational establishment." It was so superior to anything in England that he was ashamed that the Old World was so much behind the New. He declared that a similar institution there would have a powerful effect on the national weal; and in conclusion expressed the hope that the law officers of the crown would take the proper measures for such an amendment of the law as to provide means for the *bonâ fide* examination of all inventions before patents are granted. The attorney-general, following, pronounced in favor of a preliminary inquiry into the novelty of an invention which

seeks a patent. At a recent meeting of the institution of engineers, held at the town hall in Manchester, England, Mr. Asten, a leading barrister-at-law of Lincoln's-Inn, in an able paper demonstrated that the radical defect of the English system, to which almost all the existing evils are directly referable, is the indiscriminate grant of protection to *pseudo-inventions*, a thing unavoidable under the registration system; and gave it as his opinion, based on personal investigation, that the United States system had in a great measure cured the defects under which England was still laboring. The sentiments expressed were heartily seconded by Sir William Fairbairn and other distinguished gentlemen present.

Many similar opinions by able thinkers might be cited, but time forbids. It cannot be denied, however, that the movement in favor of the abolition of patents, of which Mr. Macfie appears of late as the prominent champion in England, has warm supporters. Cobden, the great apostle of free trade, was opposed to the system. Lord Granville, as chairman of the patent committee of the House of Lords in 1851, declared that he considered the issuing of patents an advantage neither to the inventor nor the public. M. Michel Chevalier, in France, has pronounced patents "monopolies that outrage liberty and industry." At a convention of German economists, held in Dresden in 1863, resolutions against protection were adopted. In the Netherlands abolition has actually been voted by large majorities in both chambers of the legislature. Switzerland never had a law on the subject. And in December, 1868, Count Bismarck, in a message to the federal parliament of the North German Confederation, took the ground that conferring exclusive rights in industrial inventions is warranted neither by a natural claim on the part of an inventor which should be protected by the state, nor is it sanctioned by general economic principles. In the face of such facts and authorities what shall be said of the policy of patents?

The opposition to these peculiar privileges is based mainly upon the idea that they constitute a system of rewards only, — well enough adapted to a rude state of society and the infancy of the arts and of commerce, but unnecessary now when the dissemination of useful knowledge is so certain and so speedy, and our remarkably developed system of intercommunication opens up so wide a field to industry and enterprise. It is also charged that they are in their essence monopolies, granted in restraint of freedom of trade, and on the whole as damaging to the inventor as they are inconvenient to the manufacturer and burdensome to the pub-

lic. The intense solicitude manifested for "the unfortunate inventor," — lest he be drawn away from the paths of steady and remunerative employment in pursuit of some impracticable idea, or lest, having attained his object, it prove a source of constant vexation and ultimate ruin both to himself and his friends, is, to say the least, a thankless expenditure of compassion. Many an inventor is unfortunate. Many a man in sublime devotion to an object that ever eludes his grasp goes through life clothed in rags and hungry and cold; and many a man, too, having embodied some grand conception in practical form, still finds the path to fortune and to fame closed against him. He encounters the unrelenting hostility of rivals or the prejudices of the laboring classes. He lacks business energy and tact and address. Capital shrinks from uncertain venture. Litigation crushes him in its iron grasp. A thousand difficulties surround him and bar success. But what is proved? How few in any walk of life who start with high ambitions reach the goal of their efforts and their hopes! In the mines, how few the fortunes made! Among the cultivators of the soil, how few acquire large estates! Of lawyers, jurists, and divines, how few rise to eminence! And how thickly strewn with commercial wrecks are the seas of trade! Shall trade then cease? The gold and silver rest forever in their native bed? The courts be closed? The churches shut? The virgin soil remain unplanted? The history of invention is full of labors and trials, of persecutions and defeats: Parliament, in the interest of labor, interdicts the use of an improved machine; the Church hurls its anathemas at him whose genius revealed the wonders of the heavens; Goodyear, with ruined fortunes, languishes in a debtor's prison; and Jacquard, his wonderful machine destroyed, exclaims in the bitterness of his soul, "The iron was sold for iron, the wood for wood; and I, the inventor, handed over to obloquy and disgrace." But it is a record, too, of brilliant achievements and richly earned successes. When *inventors* clamor for the abolition of patents, we may conclude that the system of protection is such in name only.

Nor can it rightly be charged that patents operate oppressively or unjustly upon *manufacturers*. A manufacturer has no more ground of complaint because a rival establishment has secured the exclusive use of a valuable patent by means of which it cheapens production than because it has purchased its engine at a discount, or secured a water privilege on better terms. If a desired improvement is controlled by a patent, let him purchase the right to use it, just as he would expend money upon any other desired im-

provement of his works. If the sale be refused, or the price asked be too large, let him forego the advantage. There is no more reason why he should have the use, without compensation, of a valuable machine or process developed by the ingenuity of another, on the ground that it gives his neighbor an advantage over him, than that he should for the same reason demand the extinction of that neighbor's title to the real estate which is the seat of his operations, or to the raw material upon which he works. Of all classes manufacturers have the least cause of complaint against patents; for there is no great branch of industry, in this country or in Europe, that is not largely built up upon and sustained by the inventions of intelligent and ingenious patentees.

But how is it with *the public?* Are these special privileges, as charged, a tax upon the community at large? The exclusive right of the patentee bears no resemblance to the old monopoly that was swept away by the statute of James I. That was the foe of society and progress. It sequestered from the public rights and privileges long enjoyed, and hindered the people in their lawful trade. It was a system of legalized plunder, robbing the masses to enrich the few, but creating nothing. The inventor, however, is the creator of new sources of wealth; and under no system of patents is it possible that he receive from the public more than a moiety of what he bestows. The public is always at liberty to adopt the new process or retain the old; to purchase the patented article or rest content with what it had before; and their interests will always determine their choice. If the old article or process be retained, the consumer is not injured; if the new one be adopted, it is because, from its cheapness or its superiority, he can afford to make the change. If the traveller deems the accommodations in Pullman's palace cars too expensive, he is at liberty to endure the torture of the old-style seat. If railroads charge too much for passage, he is welcome to make his journey on foot. Men ride because it is cheaper than to walk; they ride in cars because it is cheaper than to use horses; and when the feasibility of aerial navigation is established, men for the same reason will choose the flying chariots of the air, and ride upon the wings of the wind.

It is the inevitable tendency of all improvements in the arts to cheapen production. Heathcote's patented machines reduced the price of bobbinet lace from five guineas per yard to six pence. The Bigelow loom for weaving ingrain carpets both reduced the cost of the manufactured article twenty per cent. and improved the quality of the goods. The cotton-gin reduced the price of raw

cotton by increasing the production in three years from one hundred and thirty-eight thousand pounds to more than five millions. The Bessemer process of making steel has so cheapened that invaluable product that from being in very limited use heretofore it has now become largely available in all engineering operations. Without the prospect of protections and the accompanying hope of gain, it is hardly probable that Bessemer would have been encouraged to carry on the long series of experiments necessary to the perfecting of his process. Without the same inducement the Lowell Company would hardly have ventured an investment of several hundred thousand dollars in developing the capacity and testing the economy of the Bigelow loom; Cartwright would not have devoted his princely fortune to the creation of his loom; nor would Goodyear have given his life to the vulcanization of rubber.

A great invention is a thing of slow growth. It is the creation of years of toil and perplexing thought, of heroic effort and costly experiment. Without the prospect of reward capital will not go to the aid of the inventor; and it is equally absurd to suppose that men will much invent from the pure love of inventing or influenced by the hope of honor and prestige merely. Without patents, the mental conception of inventions might be; but their full development seldom. Even Bismarck is forced to acknowledge that, "generally speaking, the anticipation of a profitable use to be made of an invention for one's exclusive benefit is an incitement to the inventive genius;" and, further, that "to temporary patent right we owe the successive improvements in many successful inventions."

The large trade carried on in patent rights, as already indicated, is a convincing argument that not only the inventor but the manufacturer and the public profit from the existence of property of this description. Certainly the manufacturer would not continue to purchase these rights, and in largely increasing numbers, unless experience had taught the judiciousness of such investments; nor would the public continue to buy the manufactured article unless benefited thereby. Thus all parties profit by the system: the inventor, whose time and talents find a market; the middle man, whose capital assumes the risk of production; and the great public, who purchase and consume.

But few of the advocates of the abolition of patents are so bold as to urge this naked proposition, disconnected with some substitute for the protection now accorded by law. All admit the justice and the desirability of the inventor receiving full compensation for his

time, ingenuity, and expense; and most admit that to this end it is necessary that in some way the state lend its aid. Among the substitutes proposed is the system of purchase by the state, and the system of state bounties; it being contemplated under the former that the value of every new invention may upon request be assessed by a government commission and the amount of its valuation paid to the inventor, the invention thereafter and forever to be free to all the inhabitants of the state; and under the latter that the state shall confer rewards upon inventors after the introduction of their inventions, these bounties to be proportioned to the benefit which it can be proved has been or may be in the future bestowed upon the community at large. However possible either of these systems might be under a different government than ours, it is needless to discuss; but certain it is that the people of a republic would stand aghast at the practical operation of any system which should take from the national treasury the amounts that the owners of patents are now receiving, and in the main without its being accounted a burden, from the great public which consumes these patented articles of manufacture. To meet the economical views of the American people, the systems of purchase and of bounties would practically be operated under the most beggarly appropriations; and in the clashing of rival claimants and of hostile interests and the great difficulty of establishing by proof the real value and importance of a given invention, and especially the impossibility upon any reliable basis of calculation of estimating this value in advance, not one in a hundred of the worthy inventors of the land would be repaid for the expense and anxiety attending even the prosecution of his claim. Another great objection to either of these plans is that the entire community is taxed to pay for that which in the majority of instances directly benefits but a few, — at best a class only. This circumstance alone would reduce all appropriations to the most niggardly proportions.

Both these systems may be dismissed as chimerical. The principles of equity and sound policy would seem to dictate the vast superiority of the present system over them both. It proceeds upon the basis, first, that the inventor should derive his compensation from those who immediately benefit by his invention, and, secondly, that his compensation should be proportioned to the amount of the benefit conferred, which depends not more upon the intrinsic value of the invention than upon the perseverance, shrewdness, and energy displayed in introducing it; and thus it seems the best adapted to secure to the world the full advantages to be derived from the various applications of inventive skill.

NATURE AND SPHERE OF POLICE POWER.

Read before the American Social Science Association, at the Lowell Institute, Boston, April 1, 1870. — By T. D. Woolsey.

The subject of the present paper is the definition and sphere of the police power. My interest in the subject arose at first out of the desire — natural to all who study and lecture upon political science — of arranging the departments of state power in a satisfactory manner, and of deducing them from the purposes for which the state exists. You will perceive, therefore, that the subject has to do principally with the *science* of government, and with the opinions of writers upon it. It has little concern, in the *practical* way, with that useful and indispensable class of men, called the police, who protect us by night and by day, and who deserve a higher estimation in society than they possess. My plan will be to consider *first*, the police power of a society or state, what it means and has been taken to mean; *secondly*, the place which this power takes among the departments of administration; and *thirdly*, some points touching the magistrates and officials to whom it is intrusted.

Suffer me first to inquire into the meaning which has been attached to the word police, or to the state's police power.

The word itself is directly from the Greek πολιτεία, which denotes first, *citizenship*, or the being a member of a political community, then the *constitution*, then the *administration* of such a community. Thus we reach what may be called state policy, and in a narrower sense that part of the internal administration which is concerned with public welfare.

But what sense has been given to the word *police* by political writers of various nationalities? If we begin with those who belong to our English race, we shall find, I think, little to bring away after our researches. We shall be reminded of Guizot's remark, that the extreme good sense and practical wisdom in government of this race is not nearly equaled by their scientific skill. Few races in modern times have done so little for political philosophy, none so much for liberty united with order.

Blackstone, after noticing offenses against the public peace and

public trade, passes on to those against the public health and the public police or economy. By the public police or economy he means — to use his own words — "the due regulation and domestic order of the kingdom, whereby the individuals of the state, like members of a well-governed family, are bound to conform their general behavior to the rules of propriety, good neighborhood, and good manners, and to be decent, industrious, and inoffensive in their respective stations. This head of offenses must therefore be very miscellaneous, as it comprises all such crimes as especially affect public society and are not comprehended under any of the four preceding species" (namely, under crimes against public justice, peace, trade, and health). The offenses which he names show how very miscellaneous and how illogical this division is. They are, clandestine marriage, bigamy and polygamy, vagabondage of soldiers, gypsies and beggars, common nuisances of sundry sorts, as alehouses, lotteries, fireworks and common scolds, luxury, gaming and poaching.

The definition would include almost every violation of good manners, and would seem to point at a petty class of offenses, yet among them are included such very serious violations of family rights as bigamy and polygamy, which seem altogether out of place.

Nor is it fortunate that Blackstone chooses the analogy of a well-governed family. Between the administration of a family and that of a state there is a wide interval. A petty state on a few square miles of territory can be governed like a family, especially if the relations of life are simple. Much blame has been cast upon the early New England colonies for legislation in matters which no tyrant, the master of a populous city, could have enforced. But among them, as in the earlier days of Rome and of a Swiss canton, the state was more similar to the household in several respects than it was to a wide-spreading nation.

Nor are other English definitions which have fallen under my eye more satisfactory. Thus one of them makes police to be the due regulation and domestic order of a kingdom, — the term being more generally applied to the internal regulations of large cities and towns.

Another describes the police as the department of government which has to do with the safety, peace, and convenience of the community. Its primary object is the prevention of crime and the pursuit of offenders. Besides this it embraces other purposes, as the suppression of mendicancy, the preservation of order in great thoroughfares, removal of obstructions and nuisances, with the en-

forcing of those local and general laws which relate to the public health and comfort.

In this definition, which comes nearer to the truth than the others, there is a confusion of the offices of justice and of police power, which ought to be kept distinct.

Let us next inquire what view the French take of the police power in their theory of government. Here I will confine myself to two authorities, of which the first shall be the "Côde des delits et des peines of 3 Brumaire, an 4," *i. e.* of October 25, 1795.

Article 16. Police is instituted to maintain public order, the liberty, property, safety of individuals.

Article 17. Its principal character is vigilance. Society considered in mass is the object of its solicitudes.

Article 18. It is divided into administrative and judiciary police.

Article 19. Administrative police has for its object the maintenance of public order in every place, and in every part of the general administration. It tends principally to prevent delicts (or misdemeanors.)

Article 20. Judiciary police searches out delicts which the administration has not been able to prevent, collects the proofs, and hands over the authors to the tribunal to be punished.

The weak points of this definition are obvious. (1.) It says that society considered *in mass* is the object of its solicitudes, and yet it is *instituted* among other things to maintain the liberty, property, and safety of individuals. (2.) The judiciary police, of which it speaks, is nothing but a part of justice, — which is another branch of administration according to the continental view, or a distinct function of government, according to the English view. The officers who collect the proofs and hands over the authors of delicts to the tribunal to be punished, are surely as much officers of justice as is the prosecuting attorney or the grand jury.

The other source from which I derive light, as to what the French intend by police power, is an article in Maurice Block's "Dictionnaire de l'administration Française:" Here it is said that "police is that part of the public power which is charged with protecting persons and things against all attacks, against all the evils that human prudence can prevent, or at least diminish in their effects. To maintain public order, to protect individual liberty and property, to watch over morals, to secure public health, — such are the principal objects confided to the care of the police."

After a remark that in view of the infinite variety of circumstances in which the police is called upon to act, the legislator has

abstained from precise details, the author of the article says that the police has need of liberty of action; that attacks on the welfare of society, etc., are often so sudden and unforeseen, that government or its agents ought to be invested with the power of doing as the exigence of the case demands, "and that too without finding themselves impeded by the stipulations of private persons or by anterior decisions." "The appropriate acts of the police have nothing in them settled nor irrevocable. The measure taken to-day can be changed to-morrow for a different one, provided the latter has for its reason the public interest."

To show how wide the sphere of the police power is thought to extend in modern France, I give the subdivisions of its agency which follow directly after the words already cited.

1. Political police which relates to placards, associations, tumultuous assemblages, conspiracies, *émeutes*, public violence, printing and bookselling, etc.

2. Police relating to worship.

3. That relating to morals: as drinking-shops, debauch or drunkenness, gambling, women of ill-fame, foundlings, mendicity, theatres, etc.

4. Sanitary police, over cemeteries, mineral waters, epidemics, unhealthy establishments, public hygiene, exercise of the medical profession, sanitary regime, secret remedies (of druggists, etc.), poisons, etc.

5. Police of personal security over arms, gendarmerie or armed or soldier police, and passports, etc.

6. Police of subsistence over butchers, bakers, cereals, fairs, and markets, price-courants of grains (*mercuriales*), articles of subsistence, etc.

7. Rural and forest police, that over diseases, epidemics of animals, forests, drainage, "gardes champêtre et particulier," etc.

8. Industrial and commercial police has to do with exchangers, apprentissage, insurance, banks, the Bourse, patents, quarries, mines, steam-engines, weights and measures, anonymous societies, tontines, raceways, agents, auctioneers, etc.

9. Police of "voirie" or travel, as over steamboats, railroads, the course of navigable waters, etc.

10. Judiciary police, to call forth or facilitate the repression of infractions of order, etc.

It will be perceived on comparing these two definitions — the one pertaining to the revolutionary times, the other to those of the present empire, — that French views of what a state's police power

consists in, have changed considerably. In the earlier times it is looked at as a power to prevent and repress; in the later it has become positive as well as preventive, and in its sphere it embraces a large part of the interests of society.[1]

The French criminal courts, taking notice of offenses, show by their names the importance there attached to police power. We have, (1) courts of assize, with a more formal process, having cognizance of *crimes;* (2) tribunals of *correctional police* having *delicts* or misdemeanors for their object; and (3) tribunals of *simple police*, before which come minor infractions, called *contraventions* by the French.

Still more important is it to find out what views the Germans take of the police power. The literature of this nation touching this function of a state and of a government is very copious. I have examined with care a number of writers, amongst others of Stahl, lately minister of state in Prussia, now deceased, and of Von Mohl and Bluntschli, the most distinguished perhaps of living political writers in that country. Von Mohl especially has given his theory of police power on several occasions, both in more general works on the science of government, and in two treatises specially devoted to this point, the one of which is entitled, "Polizeiwissenschaft," or the science of police, and the other "system of preventive justice or judicial police." I regret not having had these two last works within my reach. I had given in my draft of this lecture somewhat copious statements of the opinions of these distinguished writers, but the time not allowing me to enter into details, I offer a very brief exposition of what seems to me to be the general stream of German doctrine in regard to this topic.

This doctrine may receive illustration from the distribution of administrative power made by many of these writers into military, financial, judicial, and police. The two first divisions of administration directly affect the state itself. Their object is to supply and regulate those means by which the state can preserve its existence and promote the ends at which it aims. The judicial department of administration relates to or has to do with individuals. Its activity begins when some claim of a violation of right is brought to its no-

[1] It is to be remarked, however, that in the time of Louis XIV. the term police had as extensive a sense as that given to it in Block's Dictionary. A writer on police of the year 1705, as there cited, thus expresses himself, in regard to the object of the police: "The police, as we think, is then wholly contained in these eleven parts . . . . religion; the discipline of manners; health; provisions; public tranquillity and safety; travel; the sciences and liberal arts; commerce, manufactures, and the mechanical arts; domestic servants; operatives; and the poor."

tice, or when some crime is charged against an individual and steps are taken for his trial. In other words, a complaint against an individual by another or by the state is the form which justice adopts to restore injured law and order.

But there are very extensive and manifold interests of man in society with which neither of these departments have any concern, and which may be included under the term *public welfare.* The *police department* of administration is coextensive with the public welfare. The rights of individuals and the rights of government against individuals, when drawn into question, fall to the office of the judiciary department. The interests of individuals and of society are under the guardianship of the *police* department. Police is another name for care of public welfare.

To make these abstract statements more plain let us reflect that there are many things which individuals cannot do, each acting for himself, but which united action can accomplish. Thus it is the desire of many persons in a year to cross a certain river, and but few of them can do so by the simple act of swimming. In a rude society it would not be felt to be a great hardship to swim the stream, because there is little intercourse. But as soon as numbers wish to cross in a day, either a person living near the ferry will build and use a ferry-boat, or society — that is, either the community around the stream, or what we call the state — will set up a better ferry-boat having something of a public character and responsibility, or in the end a bridge will be built, which belongs to the public, or which private persons are allowed to build at their own cost. And so again a town, compact and large, has grown up on a highway of commerce. There are swamps around it but no drainage and sewerage within, and malaria exists. No single person can prevent the evil, no separate action of many individuals can prevent it. It needs the joint action of a community to effect objects like this, whether of the state as a whole, or of the town as a smaller whole. It may be in such cases that some individuals do not or cannot receive any benefit from such action of a community, as a man may have no children to send to the public school, or no occasion to take a highway which the county has constructed. But the community acts for all without reference to particular cases. A state or town is made up of persons and is also a whole. As made up of persons it responds to the demands of justice. As a whole, having general interests, it promotes the general welfare. This is its police or policy-power.

There is however one important point as to which the best Ger-

man writers on public law are not agreed. Mr. Von Mohl separates preventive justice, so called, from the police power, in his classification, and arranges it under the head of justice proper. Now preventive justice denotes the state agency which prevents infractions of the rights of individuals or it may be of the rights of the state. A watchman or police officer who prevents theft or burglary or arson, or makes the streets safe by night, is a minister of justice; and singularly enough the very men who in our English parlance are called the police, would be denied by this very eminent writer to have anything to do with the police function of the government. For this he is blamed by Stahl, and I think justly. Let all crime be prevented, and the judiciary department would have nothing to do. The police, as we call them, no doubt materially lessen the business of courts, and would seem to belong to another class of officials. Only when wrong is done does justice begin to act. If anything can be called an office of police, as it seems to me, prevention of injuries to individuals can, and we shall see perhaps that this is in fact the principal police function.

I only add that the limits within which the state ought to promote the public welfare, or exercise this police power, are the following: *First*, the rights of individuals must not be sacrificed. *Next*, nothing immoral can be done under the plea of the public good. Nothing *again* should be done by the state which the individual can do for himself; nothing is within the province of the state as a whole which is local, and which a locality can do for itself, as well or better. These last limitations are of the greatest importance; they characterize a free people in contrast with one which is under the tutelage of the government, whose maxim is everything for the people and nothing by the people; they characterize also a people, through whose veins runs the spirit of self-government, in contrast with another whose power and state action is concentrated in a general administration. But *this* is true: that all states in a time of advanced civilization in some way, by action of a central power, or of power diffused, or by encouraging individual action, or in more than one of these methods, do strive to promote the general welfare. Free states differ not so much from despotic in leaving many things to individuals and letting the general welfare take care of itself, as in so dividing and diffusing power that all feel themselves active members of the state, and that there are throughout the system checks both against apathy and usurpation.

But we may concede that the furtherance of what is called the general welfare is of vast importance, and calls for some kind of ac-

tion under the organization of the state, and yet may inquire whether these forms of administration *ought to be classified together and to be called by one common name.*

As for the name, we may confidently say that within the English-speaking race, police is an odious term, and will not be readily used to comprehend all the protection which the state affords to the public welfare. It is odious for a reason honorable to the race, — to its love of individual rights, and to its demand of guarantees against the possible tyranny of the government. The word police has been too much associated with attempts of states to defend themselves against discontented subjects, with spies, visitation of houses, and the breaking open of letters, with annoyances fit only for a nation of children or of enemies, to be accepted as a term for one of the departments of government. Better would it be to call such a department by the name of public economy, which conveys no bad sense to English ears, and is otherwise unobjectionable.

But there are serious objections against grouping together all these forms of state action, included under the head of public welfare, as one department. The first objection is that some of them are small in compass, others are vast, and some of the latter so vast as to form in the practice of states departments by themselves. Examples will be supplied by the postal system and by education. The postal system increases with the cheapness of postage and with the enlargement of business, and acquires a new importance if the state owns public post or railroads, and public telegraphs. It has its deputies in every village, — a vast army of officers responsible and needing supervision. It is easy to see that such an agency may be regarded by the practical wisdom of society as forming a special branch of government by itself. So of education. A general school-system — especially if it include, as is the case on the Continent of Europe, all higher instruction at the university and at various special schools — is a vast collection of working powers that need to constitute a special department, separated from all others. And this is actually done more or less. And yet the care of the posts and of education come most eminently under the police power of society taken in the German sense, that is, under the head of public welfare.

The other objection to this classification is, that the agencies grouped together are not homogeneous in character. Some of them are best justified on the ground of protecting the rights, especially the life, security, and property of individuals, which is the main reason for the establishment of a city police. Men have a

right to sleep at night, and therefore there must be some one at hand to prevent riotous noises. They have a right to the security of their houses against fire and entry by force or stealth, and so watchmen and a fire department are to be provided. They have a right to locomotion and intercourse, commercial or of other kinds. Hence, ways of all kinds by land or water. Hence too the necessity of common standards of value, weight, capacity, length, and surface, with persons publicly authorized to measure and gauge. Education itself also has a side which looks toward the protection of rights. A father may educate his children himself, or commit the office to others, but he has no right to keep them in ignorance, if he can help it. The child has a right to be educated. This among other reasons defends the state's duty to provide a system of education.

Again, there is a certain kind of supervision which the state exercises over public morals, as over houses and women of prostitution, gambling, drinking-shops, and foundlings. It is easy to say that society interferes with houses of ill-fame, for example, because they are against the public welfare. But this is a very vague term. It is better and truer to say with our fathers, and with almost all severely simple stages of society, that they are *contra bonos mores*. Man, as a moral being, when the question is what ought to exist and be endured, cannot help judging under the sway of his moral feelings. He may be intolerant herein, but he is true to the best part of his nature, and there are limits, although not entirely clear ones, within which moral legislation ought to be included.

Still further the helpless poor excite the sympathies of men, and it is thought that private benevolence cannot perform the work of relieving them effectually. Hence public poor-laws, which spring out of the *humanity* of society, which rather supplement than supersede private charity. Here good-will or kindness is really the motive, but the act to which it leads is referred to the promotion of the general welfare.

We conclude then from these illustrations, that if there were such a department of the state as that of general welfare, or of police, in the large sense of that word, it would group together forms of state agency of a very miscellaneous character; and that it is, for this reason, of no value either in the science or the practice of government.

The theory, it may be observed in passing, which unites under the term *police* all the state activities for the public welfare, has had no influence on the division of power among the departments of

cabinets. The ministers of state divide their work according to some practical principle, and not in obedience to logical classification. For the most part the supervision of the police falls in Europe to the minister of the interior.

Promote the public welfare then, we would say, but do not make it a department of government, nor call it the police power. Promote it within the limits of individual liberty and individual inability to secure the ends in question by separate action. Promote it so that the central powers of the state leviathan shall not swallow up all others. Promote it by means of special official branches, commissioners, or boards for education, health, the poor, roads, and the like, give all power to localities that is by any possibility consistent with vigorous and common action, leave it free for private enterprise in many things to undertake what society would otherwise undertake, and accustom men to think not that the government is to take care of them as if they were its children, but that they are to take care of the government.

So far our remarks have had a negative, critical, and controversial character. It is harder to go over to the positive side, and endeavor to reach a definite idea of police power and of its sphere. Many have failed in this, and it would not be at all strange, if the present essay should be obnoxious to the same charge.

I would then confine the name of police to that distinct class of public functionaries whose duties consist in preventing infractions of the law, or in other words, who guard society against disorder and crime, secret or violent. They may have other functions besides this, which will be noticed in the sequel.

Such a power has always been conceded to belong to a well developed state. Even in an imperfect one, — although it may not be separated from other powers or committed to special officers, — it is felt to be an important function of the state itself. In the patriarchal system, where the judicial function was of prime importance, and police could have needed no officers of its own, as being an occasional and rarely exercised power, it naturally fell into the hands of the ministers of justice. In the Anglo-Saxon system the power was entrusted to the inhabitants of the tithing, and the hundred, on the principle of the common responsibility of relatives, and especially of neighbors, — of the *maegburh* and of the *frithborh*, or frank pledge.[1] At Athens, again, where very little of prevention was exercised, and where every citizen might appear as a public accuser if he wished, this power was scarcely developed; and yet here the

[1] Kemble, *The Saxons in England*, i. 228, and onward.

astynomi had oversight of buildings, the *agoranomi* prevented cheating in the market and in trade, the *sitophylaces* prevented forestalling of corn, and so on. The Romans had a more developed police, concentrated under the Republic more especially in the censors and ædiles, but they made no distinction that I am aware of corresponding to any modern definition of police power.

Prevention is regarded, we may say then, as a part of the public security by all governments. It is not enough that law speaks, and when disobeyed, seizes on the offender for trial; but somebody must be charged with the office of preventing offenses. The importance of this function grows with the density of population in certain spots, and with the ease of passage from place to place. Add to this that punitive justice itself demands the existence of such officers, — for they will of course sustain two characters, one to *prevent*, another to *detect* and ferret out crimes. If they had only the latter character, crime would be greatly increased, and at the same time the detective, also, having only an occasional office, would be unable to bring crimes to light like the preventive officer, who knows the haunts of evil-doers, owing to the constancy of his employment, and his familiarity with their persons. This double character of preventive officers has been one of the reasons, probably, why they have been classed with the ministers of justice. But the preventive office is the principal one, and the detective subordinate.

It may however be objected, at this stage of our discussion, that everything done for the welfare of the public *prevents* some evil. A school system *prevents* ignorance and crime; poor-laws *prevent* mendicancy and imposture; health-laws *prevent* diseases, imported or indigenous; coins, weights, and measures, with weighers and gaugers, *prevent* certain mercantile frauds; and so on. I admit of course the preventive power of all good laws, but the principal agency of most of them is a positive one. Teaching and relief to the poor are positive actions, and the mere prevention of things hurtful to society, which is their *indirect* result, is far from fulfilling the ends which school and poor laws aim at. A police, which should prevent vagabond boys from strolling around wharves and railroad stations, would by negative action play into the hands of school-teachers; and one which should prevent the shiftless poor from having the benefit of public charity would exert in this way a positively beneficial power. But yet the functions of the school-teacher and the master of a poor-house differ radically from those of a police. In regard to health there is more reason to call all the officials con-

cerned in it preventive officers, for the draining of swamps, enforced vaccination, inspection of tenement houses and of sewerage in general, with the like, are all preventive measures. And so inspection of the market may fairly be called an office of police; such offices as the prevention of the sale of tainted meat, of decaying vegetables, or of sale by false weights and measures, being rather for protection than for any positive result. But if, as was the case in Germany a number of years ago, the government should employ a physician at a public salary to cure disease, or should import wheat for the people in famine, these would be positive agencies with which a police power had nothing to do.

This preventive character of a police is almost as extensive as the need of protection for the rights and great interests of men in the state, and as the power of men to commit offenses of violence, fraud, or negligence. But in different states, and in different parts of the state, there are very different demands for it. In a society like that of New England, a century and a half ago, it took very little time to do up all the police work of the townships, and in some Christian states at the present day, where there is a general equality of society, little wealth, and little of the feverish spirit of change, there is little preventive power necessary. In other states and in large cities a police becomes a necessity, a necessary evil, if one pleases so to call it; it sustains the government, it furnishes courts with cases, its officers appear everywhere in public by night and by day, besides those secret agents who detect conspiracies, break open letters, keep servants and secretaries in their pay, and produce a general distrust and suspicion between man and man.

But a police is not *preventive* in its character only; as such it is also *auxiliary*. It has properly no substantive power of its own, like the officers of courts and of departments, but gives aid to others, when called upon for that purpose. Thus it may be said to be auxiliary to the government, when sedition has broken out and threatens public quiet. There is no preventing of evil now. There must be force to put it down. So in the case of individuals, it appears to ward off evil which they are unequal to, and to seize the offenders. So again it is auxiliary to the departments of government. A revenue cutter is an aid to the department of finance in preventing smuggling, and in resisting their violence if it should be attempted. A public vessel on the search for slave-traders, which is an instance of a police authority, acts under the departments of state or of the navy. A police when it prevents or detects counterfeiting of government paper, or the knaveries of

distillers, acts thus for the officers of the treasury. It is however as an auxiliary, a power which is called only on occasions into action. If it prevents misdoing, so much the better; if not, its action is like action in war, where days of battle are exceptions. Thus police officers are neither finance nor military officers, nor do they properly belong to any special department, but are something like the *apparitors* and *viators* of the Roman magistrates, servants or helpers of all departments of governments and of all interests in the commonwealth.

We are now brought to what some have called police states or police governments, and to the police of cities. Let us devote a few moments' consideration to our subject in each of these aspects.

1. Police governments. What is the distinction between these and other governments to which no such harsh title has been applied? All states, even the very freest, employ this arm of defense for their own preservation and the maintenance of public order, and in times of danger and insecurity such exercise of power becomes very important, if not essential. The government of England under Elizabeth, although arbitrary, was not strictly despotical; and yet, being threatened by plots without and within, to how great an extent was it obliged to employ secret emissaries in order to counteract the movements of its enemies. So too, Cromwell's police had eyes that penetrated into all the dark holes where royalists or republicans were spinning their webs. It is not too much to say that in the late war means and instruments were used, which would now seem unendurable, and which were justified only by extreme necessity. Thus all governments use police power, even, it may be, against subjects or citizens. What, then, we ask again, is a police government *par eminence?*

Its first characteristic is *that the care of civil order is always a matter of prime necessity*, or at least is thought to be so. There is a chronic state of discontent and of suspicion. Fear, not of danger from without, — of which ambassadors and public fame can forewarn, — but of internal disquiet, of disorderly movements, which may seize on the heart of a great city and may cost money if not blood to put it down, — this fear, the mother and the child of tyranny, is chronic and sleepless.

And again the disorders apprehended *are revolutionary or at least political*, proceeding from a discontented people or from a discontented party. They are not as in the seventeenth century fomented by foreign powers, but spring up within the nation itself where there is a perpetual dissatisfaction with the existing state of things. This relation between a government and a large

part of the people requires, besides the means of concentrating the military force in the last resort, a body of men whose functions shift between persuasion and force, who are able to anticipate danger, and secure knowledge of what is projected by means at once necessary and detested. It is evident that the steady employment of such a police force tends to increase the hatred of the disaffected to the government, and to these agents of government who represent and incarnate tyranny in the eye of the mass of the people.

And again, in a police government *there is a concentration* of this kind of power in the hands of some principal officer of the state; much is left to arbitrary opinion, and the subordinates are not responsible to any but the superiors for their acts. These three characteristics correspond to that fear which always keeps its eye open to the vague possibilities of danger, to that efficiency which the support of an unsteady throne demands, and to that tyranny which allows a people to have no reserved power in its hands, when once it has chosen its tyrant. If the power is not concentrated, there will appear a danger that places remote from the focus of administration cannot be managed by local police forces, the commands of the præfect must fly on the wings of the telegraph, — which in some respects is an efficient helper of the powers that be, — and he must be assured that no local interests or force will prevent his behests from being obeyed. Morever he must have authority to act *pro re natâ*, just as in cases of invasion; and his arbitrary acts must not be reviewed by courts of law. Otherwise, afraid for his head or his purse, he may not put forth the due amount of efficiency. Still more important is it for such a system, that the subordinates in their various ranks should be merely obedient machines, capable indeed of being brought to account, but not responsible for executing the orders of their superiors.

Such seem to me to be the principles of police governments as it respects this branch of power. The system has its benefits, chiefly consisting in the more efficient preservation of public order and security outside of the political sphere. Rogues and rioters know the strength of such a force, and know that it is not for the interest of such a government to fail to make use of it in repressing civil disorders. But it has its evils and dangers also. Constant espionage and prevention destroy the energy of a nation and make a government odious. Nor can a police force be always relied upon in the times of change, but like an army it may be won over to the cause of the people or of revolution. In the movements before the French revolution, when Turgot was making his reforms by which the immediate interests of the privileged classes were affected, the

nobility and even relatives of the king stirred up commotions in Paris against the innovations of the liberal minister by the agency of police officers; and as the same revolution went on, the same officers fell under the control of the party of violence against king and nobles, and helped the revolution to gain the control of Paris.[1]

2. I pass on next to say a few words upon the police of large cities. The necessity of a special safeguard for the order and security of such places is apparent, *as* apparent as the necessity for an army to send out scouts and patrols and small detachments, when an enemy is close in the neighborhood. The dangerous classes are in a state of war with social interests; our freedom allows them to come and go, and a town has its hiding-places almost as inaccessible as a wilderness of woods. The quiet citizens cannot discharge the duty of watching by night, if they are to work by day; they cannot as well combine against criminals as criminals can combine against order. Hence a well-arranged, compact, easily wielded power must take upon itself the various duties which the nature of a large town demands. And perhaps the system of such a town police must have peculiarities of its own, as it respects concentration, appointment, responsibility, power of acting in emergencies and the like, differing in some respects from the constitution of a police for other districts or places.

Some of these points in the police system as a whole, and in the police of large towns especially, I propose now in conclusion to consider, confessing however that there are practical difficulties attending some of them, which owing to want of experience I am not able satisfactorily to solve.

1. The question of concentration, as it regards the police system, may be viewed under two aspects: Ought all the kinds of officers, called *the police*, according to our restricted definition, to be united together like a military force; and ought this force in all places to be placed under the control of chiefs with a gradation of subordinate officers?

Concentration is opposed to the spirit of our institutions and has been so from the very first. Whenever the dread of consolidated power shall give way to the advantages of concentrated, we may be sure that some change of government is before us. Our policy is, then, to get along with the inconveniences which do really grow out of diffused power and local self-government, remedying them in detail as far as the order of society and the suppression of crime demand, but never giving up our present system for any imagined advantage whatever. If administration divided between the gen-

[1] Compare Sybel, *Gesch. des Revolutionszeit*, etc., vol. i. p. 34.

eral and the state governments, and in the state between the state and the local officers, becomes so unwieldy and loose-jointed that it fails of its end, let us find it out by hard experience; but let us move along our present line until it shall be proved that our division of power is a manifest failure.

In accordance with this principle I think we ought to favor the separation of police departments, where they are *radically* distinct, or where they are *locally* distant, yet giving them a certain power to act together, and facilitating their concentration under a chief in large places. There are obvious reasons for each one of these rules. Revenue cutters have a sphere entirely different from that of night and day police. They cannot then be united with the latter on any logical or political principle. The tithing-men, fence-viewers, pound keepers, howards of stray animals, gaugers and measurers, if they can be called police, are distinct from one another and from the police in the narrowest sense. They may be kept apart and ought to be. The true principle is approached by the question, Is the police called on to use force upon occasions or not? Watchmen are, and therefore need to be able to act together; but in order to act together they must be capable of being massed and disposed of like companies in a regiment. This, however, is impossible without some principle of concentration under officers who can wield them. On the other hand the persons mentioned above need no force, as an ordinary thing, to carry out their functions; the peccadilloes they prevent are not those of violence, and in an emergency they, just like ordinary citizens, can call on the authorities in whose hands the force of society is placed.

Nor is there any need of a firm, solid union between the police of cities and that of countries or townships. They are very different orders of men. If united, those of country places — rural police forces — would have to be subordinate to those of towns; and there is small occasion, I apprehend, for coöperation. When such need arises there appears to be no difficulty in bringing them into temporary concert in a legal way.

2. I pass next to the mode of appointment of this police. Here the importance of the subject touches the large cities mainly, and so far as it is involved in difficulties, they arise out of our party politics. The worst aspect of our politics is not its bitterness or one-sidedness, but its demoralizing tendency in this respect, — that men chosen to execute the law will not do their duty because the law has been made by another party. Carry this through, and justice will screen rather than punish. Whether anything can be

done to drive party out of municipal elections, by compromises or by making the minority sure of their proportion of local power, I will not stop to inquire. At present things are in the worst state possible. *The dangerous classes* of society under our system of party and suffrage, can be combined in support of a municipal government which will keep its eyes shut, and let crime slip easily along, while the quiet and orderly citizens are too blind or too busy to act in concert and with energy against them. Unwise legislation may have made the bad more ready to combine, but the evil lies deeper than existing legislation. If the worst part of a city can elect its magistrates they will be bad magistrates, and the police will be likely to be a corrupt police, whether chosen by the magistracy or by the vote of the city. The evils of this miserable state of things may not be much felt in this orderly city where I have the honor to speak, nor in this commonwealth, but my audience know as well as I do what they are and where they exist. Nor can one grand hot-bed fail to send its seeds far and wide. The question, then, amounts to this: Can cities govern themselves when suffrage is in the hands of all, both good and bad? And the alternative question is, Can legislatures govern cities by special legislation, when they themselves make party motives their leading consideration, and when the control in them is constantly changing from one party to another? I have stated a problem which I am unequal to the solution of, and content myself with saying that if local self-government in its whole extent is abused by cities, it must be taken in part out of their hands. The bearings of the subject reach far beyond the question, in whose hands the appointment and control of the police power shall be lodged. On that matter I remark only that the better classes of society need that the ultimate control of the police should be out of reach of municipal politics, as much if not more than they need that the city budget should be safe from the same influences.

3. There remains the subject of the amount of discretionary power and of responsibility which ought to attach to the officers of the police, by which we intend the relation of individuals on duty to the law, as well as the amount of authority which the chiefs of the police ought to exercise. Little discretion ought to be given to the chief officers beyond that of massing and distributing his subordinates, as the necessities of the case require. The law ought to lay down their duties so specifically that no tyrannical or arbitrary act on their part shall be justified. But the men — the privates of the corps with the subalterns — must have discretion within certain limits. They must act alone, away from all their advisers

or commanders, at night, when the time increases suspicion; and with all promptness, for they have alert and dangerous enemies. No man or squad of men ought to be called to act alone, without having discretion within certain limits. They alone can judge in the case.

But as a check on this discretion, according to the pervading principle of our system of liberty under law, they are responsible for their conduct. They cannot be shielded from the penalties of an unlawful act either by the command of a superior or by the necessities of their situation; only the last plea may be urged with all fairness for conduct that has injured innocent persons, springing out of natural or unavoidable mistake, or originating in supposed self-defense. As their situation may render mistakes inevitable and armed self-defense necessary, all due allowance ought to be made for them.

4. In closing what we have to say on the police power, we advert to the estimation in which this class of our guardians is held, especially in large towns. There is in a part of society a dislike, and in another part a contempt for them. And this feeling is quite extensive. Mr. Bluntschli[1] considers it one of the political problems of the times to raise this branch of officials in the regard of citizens. They are dreaded in absolute forms of government, as the helpers of despots; but we and the English, who have no such reason for fear, have a feeling toward them which we do not entertain toward our other defenders, — sailors or soldiers. Why should this be, when they are a most useful and necessary class, not exposed, perhaps, to any peculiarly corrupting influences, and often showing more gallantry against burglars or rioters at night, than soldiers ordinarily have a chance to exhibit? We can explain why the tax-gatherer and the bailiff are not welcome, but it is not so easy to tell why those who always protect us, with whom not one in a thousand of quiet citizens ever comes into conflict, should be held in low esteem. Can the reason be, that police power is preventive and a restraint on our natural freedom, in cases where violations of general rules in special instances are felt to be of trifling importance and not worthy of notice? Or can it be because the office of a policeman involves summary acts of *personal* power, against which men naturally revolt? Or is it owing to the fact they are in some sense moral scavengers, whose occupation seems to put them on a level with the low, so that many are reluctant to take the office? However this may be, such a feeling toward this most useful class of public servants seems to be a serious evil and needs a remedy, if one be possible.

[1] In his *Staatrecht*, ii. 175, ed. of 1857.

LEGISLATION AND SOCIAL SCIENCE.

Read before the American Social Science Association, at the Lowell Institute, Boston, March 18, 1870. — By E. L. Godkin.

In the literature of politics there is perhaps no word which meets the eye so often as the word "liberty," and there is no nobler word in it. There is certainly none about which so many touching associations cluster. We never speak of it without calling up a thousand memories of disasters and triumphs which are among the greatest glories of the human race. The Old Cause, as Sidney called it on the scaffold, has, like religion, its saints and martyrs and legends; and there is perhaps nothing, except religion, for which men have done and endured so much. Nearly all the great revolutions which form the stages in human progress were accomplished in its name, and so strong is the hold it has secured in the popular imagination, that we always speak of it as the highest political good. A people which has it is commonly believed to have all; a people which has it not, to have less than nothing.

And yet, when we come to inquire what this liberty is, which has for so many thousand years kept the world in a blaze, we find it is in itself rather an ideal than a tangible good; that the long struggle for it has been rather an energetic vindication of human dignity and independence than the pursuit of solid happiness. It is rather a means than an end; rather something which may be made an instrument of human culture, or indeed a condition of human culture in the highest sense, than a satisfaction of human aspirations. For it does not satisfy. The people who have had it have been in all ages the least content, the most restless, the most eager in pursuit of something beyond liberty, of which liberty was but the promise or foretaste.

In fact, the liberty of which we hear and read so much, — and of course it is what is commonly called civil liberty we have here in mind, — has never been this or that kind of government; what its defenders have sought has been, not so much that men's relations in society should be regulated in a particular way, as that the power of government, or the sovereignty, as it is called, should be lodged in a particular place. The political history of the civilized

world is made up almost exclusively of disputes about the seat of the sovereignty. Nearly all the troubles of the ancient republics were contests about the manner in which this authority should be distributed, or about the conditions under which it should be exercised. When we speak of any of them as having fallen, what we mean is, simply that the power passed from the many to the few, or to one. Mediæval history is made up in much the same way. The earlier part of it exhibits the sovereignty exercised by a large number of small potentates; the latter part of it, the gradual absorption of the sovereignty by a few great monarchs. And the long struggle for constitutional government in Europe, which is only closing before our eyes at this moment, has been in the main an effort on the part of the people to secure a share in the sovereignty for themselves. When we talk of political progress, what we generally mean by it is, the gradual success of the people in securing either wholly or in great part the substitution of their will for somebody else's will in the direction of national affairs. We do not always or necessarily mean that they are securing a better administration of the national affairs, or more security for life or property at home, or more dignity or influence abroad. Indeed, I cannot better illustrate the distinction than by saying that the two most important political revolutions of the modern world, that of 1640 in England and that of 1776 in America, arose out of a controversy about a tax; but the question in dispute was, not whether the tax was a good or bad one, but whether the king or the people had the right to levy it.

All this, doubtless, sounds familiar enough. I go over it simply to bring out a little more clearly the fact that the civilized world has been, down to our day, occupied so incessantly with the task of fixing the form of the government, that not only has the form of the government come to be popularly regarded as the great end for which states exist, but that very little progress has been made in the *art* of government. The question how to secure liberty, that is, how to secure a share in the sovereignty for the many, has occupied the race so constantly since the dawn of history, that very little attention has hitherto been bestowed on that greatest of all political questions, the use which we should make of liberty after we have got it. Sovereignty is, after all, only a means; the end for which political societies exist is right living, and not any particular distribution of the supreme power; and the sole claim of civil liberty on human affection and admiration lies in the fact that under it human faculties are found to have freest play, human

energies most force, and human aspirations the widest and loftiest range.

Of course this struggle could not go on for so many hundred years without being accompanied, through the mere growth of civilization, by a great many reforms in legislation ; but the reforms in legislation were not its final or main object. Had they been, the movement towards democracy might have been arrested at any given time, or in any given place, by the establishment of a paternal despotism or of an enlightened oligarchy. The father of the late Grand Duke of Tuscany, or the Bernese or Venetian patricians, might fairly have said that they did for the people as much as the people were at all likely to do for themselves. It has indeed been a favorite conservative fancy in all ages that the mouths of political agitators might be stopped by the provision of peace and plenty, justice and security, for the many by a ruling and enlightened few. Occasionally it has seemed as if this vision were going to be realized, but the illusion has never lasted long. The liberal movement, as it is called, has been unsteady, but it has been continuous ; it has often been imperceptible for brief periods, but it has never ceased. All compromise has been found impossible, and we are now on the point of seeing it close all over the civilized world, by the reference of every great question of national concern to universal suffrage, — which is simply a name for the widest possible distribution of the sovereignty.

Considering how severe the struggle has been, and how largely wealth, power of organization, and religion have been on the side of privilege, it is hardly wonderful that it should have lasted so long, or that it should have resulted in so few contributions to the science of government. Indeed, when we come to review the stock of political ideas, and the political mechanism now in our possession, and compare them with those bequeathed by the Roman Empire to the modern world, we have reason to be astonished, if not ashamed, of the smallness and insignificance of the additions we have made to the legacy. To the mechanism of government we have really added nothing but the representative system, an admirable contrivance, it is true, which has made possible in the modern world what was not possible in the ancient world, — a large democratic state. In the government of municipalities, as we received it from the ancients, we cannot be said to have made any improvements, except such as the advance in the physical sciences have forced upon us, — such as improved means of lighting and ventilation and locomotion. In provision for popular cleanliness

and recreation, and in sewerage, our cities are inferior to the Roman cities. We have, it is true, discovered in popular education one preventive of crime, of which the ancient world knew nothing; but then, although we understand the laws of political economy, which the Romans did not, and honor labor, which they did not, and have got rid of slavery, which dragged their empire down, we find the government of our great cities just as serious a problem as Julius Cæsar found it. Before such a state of things as presents itself in New York and Chicago to-day, modern democracy stands nearly as helpless as the oligarchy stood before the Roman mob in the last days of the republic. To the art of rapidly civilizing and assimilating populations in a lower social condition, which the Romans possessed in so high a degree, and of which no satisfactory explanation, I think, has ever been offered, the modern world can certainly lay no claim. It is, indeed, only in our day and on this continent that the experiment has been renewed with any degree of success, though some very remarkable results begin at last to be attained by the English in India; and yet it is not made here without considerable loss to the higher influence in the process, far greater, there is reason to believe, than Rome suffered in bringing the Gaul or Iberian or Briton up to her own level.

As regards the administration of justice, including under that term the whole of the machinery by which rights and duties are defined and enforced, we have certainly contributed little to the work of our judicial ancestors. The Roman law has been for ages, and still is to modern jurists, what the Coliseum was to mediæval builders, — a great quarry from which the materials of all other systems have been drawn in rich abundance; and to this day there is no civilized country in which it is not resorted to for guidance in those nicer applications of morality for which the increasing complication of human affairs is constantly calling. We have, it is true, made a great and beneficent contribution to civilization in our system of international law, but the very foundations of this we have drawn from Roman jurisprudence. The Romans could not construct it as long as their empire included the civilized world, since international law arose out of the existence of a large number of equal and independent states. Political economy, too, is the work of the modern world. The Romans knew nothing of it, and their ignorance eventually proved fatal to the empire; but then for the construction of this science, which has already exercised so marked an influence on the government of modern states, a wide field of observation and a long and rich experience were absolutely

necessary, and these the ancients did not possess. If we take up Adam Smith, the father of the science, and examine closely the materials from which his conclusions are drawn, we shall find that it has taken the social and political life of many nations and many ages to furnish them. Political economy was, in short, in its beginnings, and must largely remain, till the end, the product of observation; and for fruitful observation, length of time and wideness of field are absolutely essential. It must be confessed, too, that in no country in the modern world is the machinery for the exposition and application of the law nearly so perfect as that which the Romans possessed for several centuries. No modern nation has managed to retain in its bar the intellectual *élite* of its population, as the Romans did, and secure from its foremost men that assiduous, acute, and singularly practical cultivation of legal science which made Roman jurisprudence one of the noblest products of the human understanding.

Our superiority to the ancients in the clearness and tenacity with which we hold certain humanitarian ideas is unquestionable, but then we have struck out few or no fresh ones. The idea of the brotherhood of man is older than modern civilization. Its practical application in the Roman Empire was prevented even in Christian times by the constitution of the state, which rested on conquest and slavery. But then we have had it in our charge for full twelve hundred years, and it is only in the present day that it can be said to be making its way into politics and exercising a marked influence on legislation, although during the greater part of that period there have been half a dozen states in which the experiment might have been tried, and during the whole of it we have had a great ecclesiastical organization expressly devoted to the duty of preaching it. The family has in our hands undergone some amelioration. Women and children occupy a better footing among us than they did in the ancient world, but owing rather to the softening of manners than to improvements in positive law.

Of course, in instituting these comparisons, I do not mean to assert that the state of society now is not greatly superior to anything that was known in the ancient world. In personal purity and practical humanity particularly, our superiority is known to all readers of history, and modern society is a free society. What I mean to say is, that the improvement in the condition of society has not been the consequence of, and has not shown itself or has shown itself only faintly in, legislation. In fact the stream of social progress may be said to run separate from that of legal progress.

Nations have been, on the whole, better than their laws. If, for example, we were to have judged of the manners of any European people, down to the close of the last century, by its criminal code, we should have concluded it to be far more brutal than it really was. Or if we had judged of the state of religion by the legal relations of the church to society, we should have concluded that religion had no influence on men's lives at all, or only a degrading one.

When we come to inquire how it is that the art of government has not kept pace with the other arts, how it is that society has made more rapid progress than legislation, that in the field of statesmanship the modern world has achieved so much less than in the field of natural science, we find ourselves face to face with a somewhat complicated problem. Considering the amount of attention politics have always absorbed, how deeply interested every human being is in the proper regulation of his relations with his fellows, it does at first sight seem very wonderful that as soon as the proper scientific method was discovered, and the scientific spirit began to grow, human society did not form one of the earliest objects of its application; that observation and experiment, collection of facts and comparison and induction, did not play in legislation as large a part as they played in the physical sciences; that, in short, the much talked of study of mankind should have exercised so little influence on the lawgiver. It must not be supposed that it is democracy only which has discovered anything good in the people. There has, it is safe to say, never been a system of government which did not rest on the assumption that those who lived under it loved good rather than evil, and desired justice done. The worst tyrants have counted or affected to count on the attachment of the great body of their subjects. In all that we read of the kings being a terror to evil-doers, and of the magistrates not bearing the sword in vain, it is taken for granted that the evil-doers were but a small minority, and that the bulk of every community rejoiced when the sword fell. The happiness of his people, too, has always been set forth as the main object of a wise ruler's care, and a knowledge of his people a requisite for the proper discharge of his duties. Nevertheless, the idea that legislators were bound to adapt their legislation to the people, that popular wants, wishes, and weaknesses should form the basis of it, and that, in short, the inductive method should be used in the work of government, seems not to have been recognized or acted on till the present century. Bacon, strange to say, after showing the applicability of his new philosophic method to

everything else, stopped short when he came to politics, and announced that with regard to this "he preferred to be silent." Elsewhere he speaks of government as a mystery into which the governed should not pry, although in treating of the laws he shows that the usefulness of his philosophy in politics ran in his mind.

The most powerful hindrance to scientific legislation has been one of the great sources of law, — custom. "There is," as the poet says, —

> "a sanctifying power in years ;
> What age has rendered gray appears divine."

The tendency in human nature to contract habits, that is, to find not only the difficulty of doing a thing decreases the oftener one does it, but to find pleasure in doing it because one has often done it, probably does more to smooth the path of life for us than any other feature of our mental constitution. Now habit, or custom, as it is more generally called, has always played in politics a part even more important than it has played in private life. Its influence on the career of nations has been just as strong and far-reaching as its influence on the career of individuals. Until the world has reached a stage of culture from which it is yet far indeed, we may be sure all political systems will largely rest on it. All governments may be said, down almost to our own day, to have rested on it.

Now custom opposes itself to change, and even change for the better, in several ways. First of all it makes it *difficult*, even when the existing state of things is thoroughly rotten. Then it gives the established order a character of sanctity ; in other words, it makes change seem impious ; and last of all, it makes it seem dangerous and inexpedient. One of the most striking illustrations of its power in giving the established order of things a sacred character is the growth in modern Europe of the doctrine of the divine right of kings as it used to be called, or of legitimacy as it is now called, under cover of which ruthless military conquerors grew in the full light of day, and before people's eyes, into the Lord's anointed, the dispensers on earth of his mercy and justice. In fastening on all things new the mark of danger, custom has at its back, too, that most ancient of all political beliefs, that the golden age was in the past, which was simply a poetic way of expressing the idea that all change meant decline, that the more men differed from their ancestors in their ways of thinking and acting the worse they were. As far as politics was concerned Christianity did little or nothing to dispel this belief. For the first thousand years of its existence the church treated the condition of the world as hopeless,

and taught the believers — that is, the only portion of society which was troubled by its evils, and was willing to labor for reform — to expect no improvement on this side of the grave.

The golden age was transferred to the future, hope began to exert a marked influence on politics, and a belief in the perfectibility of human society, or at least in its capability of indefinite growth, began to gain ground, and give vigor to reformatory effort, only after long-continued observation of the fact that, in spite of its badness, society *did* improve, and improve steadily. The rapid advance of discovery and invention, too, after the introduction of the new scientific method, kindled expectation to an extraordinary degree with regard to the social future, especially after the influence of scientific research on men's material condition began to be fairly perceived; so that in the sixteenth century men began to look for the kingdom of God on earth, and look on the world as a sphere worthy of men's highest powers. But the spread of this faith was naturally slow, and it is only within the present century that we have ceased to hear "the wisdom of our ancestors" used as one of the standing arguments against political or social change. Nothing could better illustrate, indeed, the fast hold the old doctrine had taken on the human mind than the importance which one constantly finds attached in political literature, as if it were a striking discovery, to Bacon's observation, "Antiquitas sæculi juventus mundi," — that what we call antiquity, in point of time was in reality the youth of the world, — its age of ignorance and inexperience.

Perhaps nothing has formed a greater obstacle to the growth of scientific legislation, however, than ignorance of human nature. Human nature, it has to be remembered, is the main element in all social and political problems, — human nature as it is, and not as it ought to be, or as we should like to see it, — a proposition which seems simple and commonplace enough, as I here state it, but which has, nevertheless, been ignored or forgotten in nine out of ten of all the schemes of reform ever set on foot. The consequence of this non-recognition or forgetfulness is that we constantly hear the failure of governments, and of plans for the regeneration of mankind, accounted for by the fact that some body of persons who ought to have been public-spirited were selfish; others who ought to have been wise were foolish; others who ought to have been industrious were lazy; and others, again, who ought to have lived at home peaceably, went about robbing and murdering. Now this is very much as if a chemist should tell us of the wonderful

results he would accomplish, the valuable contributions he would make to the arts, if it were not for the fact that bodies would only combine in certain proportions, or if the action of heat did not expand or that of cold contract. The weaknesses of men, their follies, vices, passions, prejudices, are for the purposes of the statesman or social philosopher essential parts of all questions of government. He cannot eliminate them: he must deal with them; and if his schemes fail on account of their existence, his failure is just as complete, almost as inexcusable, as if they did *not* exist.

There is one very striking and very mysterious quality in human nature which does a good deal to complicate all political problems, and that is, that in men in masses this nature is very different in many respects from what it is in individual men. Individuals, in short, are greatly changed when they are combined into great bodies. Motives act on them with different degrees of force; considerations which weigh powerfully with a man in his own home weigh very little with him when he is at a public meeting, or marching in a procession, or in the ranks of an army. We are forced to admit, too, however firmly we believe in the freedom of the individual will, or however thoroughly convinced we may be of its control over the career of the individual, that, as a member of society, he lives under a different law, and that on the destiny of society his free will, as far as we can see, exerts but little influence. *How* this is, or why this is, at what point the action of the individual's freedom ends, and that of the laws of the social organism begins, are questions on which I do not purpose entering here. They are parts of that great controversy about liberty and necessity which began when man first began to study his own nature, and will probably last as long as the race lasts, but which has derived fresh heat of late from the attempts which have been making to construct a science of society. Even if we admit, however, that no such attempt will ever be completely successful, there is no denying that some very important contributions toward it have been made by close observation of social phenomena, and that, even if we have not discovered the laws of society so as to be able to predict accurately the course of human affairs, we have discovered certain *tendencies* of society with sufficient accuracy to form in many fields an excellent basis for legislation. Take as an illustration of this the advance that has been made in the means of securing discipline in the army and in prisons. It was held for centuries, and held with perfect honesty, that to obtain obedience from men in an abnormal state of restraint, fear inspired by terrible pen-

alties, and constant repression, were the only instruments of any efficacy. This theory has been almost totally abandoned in practice, as the result of observation and experiment, and now as much reliance is reposed on appeals to men's self-respect, by mere disciplinarians as by philanthropists.

For the discovery of social tendencies, however, for purposes of legislation, wide observation of phenomena and the industrious and careful collection of materials are absolutely necessary. But no such processes were carried on down to a very recent period, for two reasons: the first was that nobody thought them necessary; the second, that the machinery for collecting them did not exist. Europe emerged from the Middle Ages with an ideal of the state, in which human nature appeared as a thing to be curbed and subdued, and not a thing to be accommodated or trained. In this ideal, too, the king derived his authority directly from God, and was responsible only to God for its exercise. The nobility also were of divine ordinance, and were intended to be an ornament and bulwark for the throne, and a guide and director for the common people. The state itself was to be first of all united thoroughly under one faith, one king, and one law. It was to be self-supporting, to produce within its own borders everything necessary for its sustenance in peace and its defense in war. Foreign commerce, and, indeed, all intercourse with foreigners, was an evil to be kept within as narrow limits as possible. War was not an evil; even Bacon declared it to be to the body politic what exercise was to the human body. The king was the father of his people; he prescribed their belief, the employments in which they should engage, the manner in which they should invest their capital, nay, sometimes even the material of their clothing.

In a system of this kind statistics were of no use, and accordingly none existed, and would hardly have existed, even if the machinery for collecting them had been attainable. How far, indeed, the idea of experimental politics was from the minds of the men of all parties, and has continued to be almost down to our day, was well illustrated in some of the leading attempts at reform. Few men entered on the work of reform in the sixteenth and seventeenth centuries with the idea simply of extirpating abuses. They generally had in their heads before they moved at all an entirely fresh ideal of either church or state, which they sought to substitute for the old one, but without mixture or compromise. Their objection to the old order of things was not simply that it failed to answer its purpose, but that it occupied the ground on which their own heavenly city was to stand.

But even if there had been any general desire to arrive at political conclusions under the guidance of experiment and observation, the administrative machinery in every country was too defective for the collection of accurate or trustworthy statistics. Very little, therefore, was or could be known by any government, of the numbers, resources, tastes, habits, or tendencies, of its citizens. Great and striking evils were indeed met by legislation; but as to the effect of the law there generally prevailed as much ignorance as indifference. Provinces were remote; distances, measured by time, were enormous. The civil service was in the rudest condition; the art of collecting and arranging figures was unknown, or barely known, — at least no skill in it had been attained. Nearly all political writing, therefore, was purely speculative. The argument started from a series of assumptions, resting largely on ancient history or biography, and ended in a kind of poet's dream. The preambles to edicts or acts of parliament, which for ages contained the only reasons for a law which the people was permitted to receive, were, in nine cases out of ten, statements of moral maxims or religious dogmas. Men were directed to do this or avoid that in the general interest of virtue, or for the honor of God. And it is no less singular than true, that attempts to make law conterminous with morality, to enforce legally the practice of private virtues or the performance of religious duties, have been marks of a declining and rudimentary condition of the political art. One of the most curious features in the history of the Roman law is, that as the empire decayed, the jurists fell off in learning and acuteness, and the bonds of social and political morality became relaxed, the attempts to enforce the performance of self-regarding duties by legislation, and to make religion the formal basis of politics, became more and more frequent.

The legislator who, before passing a law, consults simply his own view of fitness, or abstract moral rules, or religious ideas, or philosophic laws, and when he finds his laws hard to enforce simply increases the penalty which sanctions them, belongs to the old school. He who, before he passes a law, asks, Can I enforce it? what effects is it likely to produce besides the one I have directly in view? what does human experience tell us as to the working of similar measures? what difficulties does my own knowledge of human nature suggest that it is likely to meet with? — he who asks these questions belongs to the new school. The gulf between them is nearly as wide as that which separated the alchemist from the chemist. The principle once established, that the impracticability

of a measure is the strongest objection that can be made to it, — that, in short, the value of legislation depends, for the most part, and under most circumstances, on the ease with which it can be put into execution and on the nature of the effects which follow it, and we open up an entirely new field in politics and give a new character to our civilization. We initiate a revolution in the art of government, and one that promises results no less fruitful for human happiness than those produced by the application of the experimental method to other sciences. In fact, we for the first time apply the laws of the human understanding to that "great problem of man," as the German historian calls it, — "how to live in conscious harmony with himself, with his neighbor, and with the whole to which he belongs."

It may safely be taken for granted that the conflict about the form of government being over, and democracy having remained, and being almost certain to remain, during the remainder of the present cycle of civilization, master of the field, we shall witness a period of extraordinary activity, both in the collection of facts and of generalizations from them for political purposes. The governmental machinery in all civilized countries has been brought to a high degree of perfection; the accumulation of statistics has become easy, and great skill has been attained in the arrangement and collation of them. Thousands of trained observers are engaged in noting with minuteness every phenomenon of society. Every year witnesses immense additions to the store of our knowledge with regard to human wants, weaknesses, desires, and tendencies, as displayed in trading, travelling, manufacturing, marrying, educating, governing, obeying, fighting, eating, drinking, and even pleasure-hunting. There is hardly an act of our lives that we do not perform under the inspection of a social philosopher or a curious traveller, of a revenue commissioner or a legislative committee. The materials for political deductions already form a huge mass, and they increase from year to year with growing rapidity, under the influence of the process of assimilation now going on among all civilized states.

This assimilation may be said to be both unconscious and conscious. By unconscious assimilation I mean that which is the indirect effect of greater security and improvement in the means of locomotion, the growth of intercourse between the inhabitants of different countries, and the increasing familiarity of every people with foreign literature through the spread of education. The enormous demands on the resources of authors made by the reading

public of our day, and especially in the field of light literature, forces authors to search for their materials over an ever-widening field. There is hardly a phase of the social life of any country in Christendom with which novel-readers, for instance, are not now familiarized, through the plots and illustrations of their favorite writers. Moreover, the isolation in all fields of thought, under which nearly all that is distinctively national in ideas and expression has grown up, may be said to be no longer within our reach. The man who in any field of intellectual labor takes pains to protect himself from foreign impressions by complete seclusion runs imminent risk, when he reappears in the world with his finished work, of finding his finest thoughts in last year's gift-books, and his discoveries not only anticipated, but grown stale. Indeed, no matter what literary product is now presented to us, we find it difficult to say in what proportion any country or age has contributed to its growth. Of the effect of this growing community of ideas on manners I need hardly speak. Combined with travel, and the minute attention paid to foreign affairs by the newspapers, it is producing a sameness of type in many ways of thinking and of acting all over the world, which social and political philosophers — and not without some very good reasons — deeply deplore, but which, nevertheless, seems necessary to the realization of the social ideal which the modern world has set before itself.

By conscious assimilation I mean the effort, which has only shown itself markedly within the present century, but which every nation is now making in a greater or less degree, to adopt for its own use whatever seems to it good in the customs and legislation of other countries. In other words, there has grown up in the sociology of our day what may be called a *comparative department*, the work of which is done mainly by the press; but all reformers assist in it, and there is perhaps no feature of democratic civilization which marks so distinctly the line which separates it from that of the mediæval, and still more that of the ancient world. Down to the French Revolution, — indeed, one might say down to the fall of the first French Empire, — the great aim of sociologists and politicians was to preserve the national manners and the national social arrangements distinct and pure. That a contrivance or idea was foreign was considered a good reason for not adopting it; that it was native, a sufficient reason for retaining it. The work of comparing the national institutions with those of other countries for any purpose except that of self-glorification, was treated as a traitor's work, and involved a kind of martyrdom. But there is

now hardly a field of social activity in which this work of comparison is not diligently carried on by the ablest and purest minds of every country. With regard to education in all its stages, — to the government of cities, the management of hospitals, the care of the public health, the prevention of crime, the management of prisons, the regulation of the means of public locomotion, the construction and arrangement of dwellings, the composition and preparation of food, the organization and discipline of police, the relations of labor to capital, and of politics to morals and religion, — there is no civilized nation which is not engaged in watching the experiments of its neighbors, and taking notes of them for its own use.

In the field of comparative legislation, properly so called, this same process is also to be witnessed, and it is much more rapid than those who are not familiar with it imagine; but it has been so long the object of special cultivation at the hands of jurists, that less need be said about it than about the larger field of comparative sociology. What is going on in it, however, I may explain by saying that the main feature of legal reform everywhere is the introduction of rules of pure equity, and the subjection of procedure to purely logical and rationalistic methods. The process of codification, for instance, which did not begin until early in the last century, has done away with a state of things on the European Continent which to this generation seems almost incredible, so deeply was society entangled in a network of local usages. There were two hundred different systems of law actually in force in some of the states of Italy little more than a century ago; a single village often lived under laws of its own; Germany had much the same story to tell; that portion of France north of the Loire, if anything, a worse one. Niebuhr speaks of a house and small estate, if I remember rightly, in Dantzic, which descended from generation to generation, under a custom peculiar to that piece of property. Now the result of codification, and of all revisions or reforms in the law, is to bring the codes of all countries into closer resemblance, and for the simple reason that they all draw, in making their changes, on the great store of principles and maxims which the Romans did so much to accumulate, and to which the labors of every generation of philosophers add something, and which, being neither more nor less than applications of pure morality to human affairs, belong to no nation or age in particular, but are the patrimony of all, and profitable for all. In the classification of offenses, the modes of punishment, the rules of evidence, the laws of marriage

and divorce, the laws of inheritance, the limitations on the province of government, the modes of taxation, — one perceives everywhere a gradual but steady disappearance of the differences which for the last twelve hundred years have so strongly marked the jurisprudence of the various states of Christendom. It is hardly necessary to say more, by way of indicating the great extent to which the facts which furnish the materials of legislation, and of which the legislator is bound to take notice in order to legislate successfully, are multiplying. His field of observation is no longer confined to his own country; it is coextensive with Christendom. He may get a suggestion from England, a warning from Russia, an example from France, just as readily as from his own state.

When we come to ask, however, what are the nature and fitness of the machinery which the civilized world possesses, or is preparing to enable it to do the work of collecting, arranging, comparing, and inferring, which this abundance of material makes necessary, and which the growing complexity and delicacy of social as well as international relations imperiously call for, we find ourselves in the presence of a question of exceeding difficulty, with which, however, nearly everybody's mind is consciously or unconsciously filled. Nevertheless, anything one can say about a radical answer to it in the present stage of the discussion is pretty sure to wear the appearance of rather wild speculation. The question is, whether representative government in the form in which we now have it, that is, a government of large assemblies, or, as has been well said, "government by public meeting," made up of all sorts of persons, none or next to none of them having any special qualifications for their task beyond agreeing generally with their constituents as to the more prominent public questions, and being therefore competent to express their wishes in an indefinite way, can ever be made an instrument of scientific legislation, that is, can ever perform that nice adjustment and readjustment of men's legal relations which the peculiar nature of modern civilization constantly calls for. It is becoming clearer and clearer every day that the hope that the time is near when a short and simple code will supply the legislative wants of modern commercial communities is utterly chimerical. The number of new laws doubtless need not grow as it now grows; but as human wants multiply, and the means of gratifying them multiply, laws are sure to multiply too. Every new phenomenon creates new relations with other phenomena, and each new relation calls for a new legal rule or the modification of the old one, and this demand must be met, if not by skilled then by unskilled legis-

lation. The whole civilized world is now trying to meet it by legislative assemblies. To government by public meeting every civilized country has come or is coming. Parliaments are the great boast and glory of our age, and they have two undoubted, never-to-be-shaken claims on popular respect and admiration. One is, that they are the outward and visible sign of the victory of democracy over oligarchy and monarchy. Their rise into power marked the passage of the sceptre, after that long struggle of which I have already spoken, from the hands of the few to the hands of the many. The other is, that their existence and activity are tokens that the people are really managing their own affairs, and that their will, be it well or ill expressed, is the law of the land. But, nevertheless, it is clearer every day, — all thoughtful men acknowledge it with alarm and anxiety, — that they are proving more and more unequal to the burdens society now lays on them. Their task in simple agricultural communities, such as all communities were down to the beginning of this century, was simple enough. They had to keep things fixed as they were, and they did it. They have now to make things go, and they do not do it. What with ignorance, haste, want of training, and the distractions of an infinite variety of details and of multifarious conflicting interests, legislation is becoming in every legislative body in the world often rather a positive hindrance than a help to healthy progress, and a sapper rather than strengthener of public morals. The remedy which has been sought, and to some extent applied, is the appointment of committees or commissions for the examination of questions that it would be too outrageous and too ridiculous to treat off-hand by general debate; but such committees naturally partake more or less of the character of the body which appoints them, and, as the creatures of its will, of course their influence is slight, and their recommendations for the most part unheeded. And yet these committees and commissions may really be said to be the sole attempts which we now make in the direction of reform in the legislative machinery.

I risk nothing in saying that this state of things cannot last very long. What the nature of the final remedy will be I do not pretend to predict, but nothing is more certain than that the next great political revolution in the Western world, which will take place after the popular delight in parliaments as mere symbols of victory has passed away, will be some such change in their organization as will not only supply the means of giving prompt, but also scientific expression to the popular will, or, in other words, will place men's relations in society where they never yet have been placed, under the control of trained human reason.

I suppose nobody rises from the consideration of the social and political condition of the world in our day, without asking himself with more or less misgiving — even the most hopeful feel it at times — what, even after we have done everything we can do to make progress healthful, are we coming to? Where and when are the bad agencies which we all see so thickly around us to be arrested, and by what agencies? When is "the transition period," as it has got to be the fashion to call an uncomfortable and perplexing state of things, to be over? These are questions hard to answer, and which most of us are often obliged to take refuge from in general reliance on the greatness of man's destiny, and on the law of growth, under which history warrants us in believing human society, as well as meaner things, has existed from the beginning, and will exist till the end. They certainly cannot be answered satisfactorily, but they nevertheless suggest some reflections, which may save most of us the need of answering them. Is it not difficult to see that the cycle of civilization which succeeded to that of Greece and Rome is complete, and has brought our modern world to a pass very much such as that in which Rome found herself in the closing days of the empire? The triumphs of her arms and her polity, continued through several hundred years, brought her at last all along her vast frontier into contact with hordes of barbarians, who for ages had sat in darkness, but the hour of whose liberation at last had come. They broke through her boundary line in every direction, and wasted and destroyed treasures without number, but nevertheless saved enough of her traditions, of her learning, and of her art, to take up the work of civilization where she had left it, and carry it forward, with better methods and a loftier ideal than she had ever known. The lesson of that great catastrophe, the most tremendous in human history, was clearly this, that Providence, in the government of the world, cares little for individuals, little for nations, and little for races even, but everything for mankind. The most fortunate of historic communities — those that have been most successful in all the paths which it is permitted human intellect and human energy to explore — have found, as Greece and Rome found, when they reached the end of their career, that as long as any portion of the human race lagged behind, continous advance was impossible; that at last the inevitable hour came, when the meanest and most despised had to be admitted not only to share, but even in savage haste to trample under foot, the fruits of ages of glorious toil; that, in short, it was a fundamental law of the social organization, that none should labor for

themselves alone, and that progress must be diffused sooner or later among all.

The body of persons known as the upper or educated classes of society, who, taken altogether, both here and in Europe, have formed a kind of intellectual state, and in whose safe-keeping the interests of civilization have been since the Dark Ages, and to whose labors are mainly due all the advances the world has since made in art, in literature, in science, and in civil polity, now find that, having extended their empire almost to the remotest parts of the globe, the barbarians can no longer be kept out. With some the mere growth of industrial enterprise under the stimulus of science has brought us into contact; with others the mere cultivation of humanitarian ideas. Steam and commerce have brought the negro and Chinaman to the gates of our civilization, clamorous for admission; the spread of education and the increasing strength of moral ideas have brought the poor and despised and ignorant of all other races. For the frontiers of this modern empire are not territorial, but social; its barbarians are found within its own borders, in the streets and lanes of its own cities. Their rush into the forum and into the temples and palaces and libraries is not an agreeable sight to witness, and it would be foolish to expect that under their ruthless touch many gifts and graces will not be obscured, many arts will not be lost, many a great ideal, at whose shrine the best men and women of thirty generations have found courage and inspiration, will not vanish from the earth. Moreover, those who flatter themselves that we are to have no stage of darkness, that the renaissance is already at hand, if history teaches us anything, assuredly deceive themselves. The process of development is in the moral as in the physical world exceedingly tedious. The "mills of God," as we are constantly reminded, "grind slowly" and the good that it takes ages to prepare for men it often takes ages for them to learn to enjoy. We shall, doubtless, now pass through a period of much ignorant fermentation; we shall see a great number of old experiments repeated, with the old and well-known result; a great many old discoveries rediscovered, and a great many attempts to embody in legislation wild anticipations bred and nourished through generations of ignorance and privation. But then we know that no conquest of the human intelligence will again be lost; that the records of human experience are beyond the destroyer's reach; that the hold of science on human thought will never again be relaxed; that all that is best in human thought will find every day readier expression and wider influence; and that, whether the end be far or near it is certain.

REPRESENTATION OF MINORITIES.

Read before the American Social Science Association, at the Lowell Institute, Boston, April 5, 1870. — By David Dudley Field.

We call ours a popular representative government; that is, a government of the people acting by their representatives. The theory of every law in any one of the States is expressed in the enacting clause of New York statutes, which is that "The people of the State of New York, represented in Senate and Assembly, do enact as follows." The purpose of the present essay is to show how far this is true, and if not true, how it can be made so. It is no part of my plan to examine the reasons for regarding the theory of our institutions as the true one. That belongs properly to another discussion. We are not now to compare republican governments with those which are monarchical, nor the different kinds of either class. The fundamental principle of American polity is, that all government comes from the people, to be exercised by them, and for them. The motto supposed to be written here upon every symbol of authority is, "from the people, by the people, for the people." The conformity, or rather nonconformity, of our practice to our theory is the subject for present discussion. In pursuing it, I will, for illustration, begin with my own State, New York, — that great commonwealth, which stamps the name of the supposed lawgiver upon the front of all its statutes.

Our legislature is composed of a Senate and Assembly, the former consisting of 32 members, the latter of 128. Each member of either House is chosen by the electors of a district, the limits of which may be changed every ten years, so as to make each district equal in population. Each district is single, and at each election the candidate having the largest number of votes is declared elected, though that number may not be a majority of all the votes belonging to the district, or even of the votes cast. If, for example, there be three candidates, two of whom receive each one third of the votes, less one, the third candidate will be chosen, though he has received only one third of the votes, with two added. The Senate is chosen every two years, the Assembly every year. In 1868 eight hundred and eighty-one statutes were passed; in 1869

nine hundred and twenty. We now begin to perceive how truly, or rather untruly, speaks the enacting clause of each of these eighteen hundred and one statutes. Apart from the fact that the Senate chosen in the autumn of 1867 for the next two years may not be the Senate which the people would have chosen in the autumn of 1868, we see that each election must have resulted in giving the representation to a majority or plurality in each district, leaving all the rest of the voters unrepresented. Thus it may happen, and does in fact often happen, that, inasmuch as a bill may be passed by a majority of the members elected to each House, 17 senators and 65 members of Assembly may enact a law, and these 82 men may, in fact, hold their seats by the votes of a minority of the electors of the State. If the enacting clause were then to speak truly, it would run in this wise: "One third (or one fourth, or one fifth, as the case may be) of the people of the State of New York, represented in Senate and Assembly, do enact as follows."

This comes of perverting what should be a personal selection into one that is local or territorial, and makes a legislature almost as likely to misrepresent as to represent the will of the people. Let us see how the system works.

We will look at the State governments first, and the National government afterward. In doing so, we will take for the most part the election of 1868, the time of the last presidential election, and therefore most likely to bring out a full vote. In the Senate of New York 17 Republican senators had been elected the year before by 324,687 votes, and 15 Democratic senators by 353,136 votes. In the Assembly 76 Republican members were elected in 1868 by 397,899 votes, while only 52 Democratic members were elected by 431,510 votes. There were thus 28,449 more votes cast for the 15 Democrats in the Senate than were cast for the 17 Republicans, and if the representation had been faithful to the principle, there would have been 17 Democrats and 15 Republicans, and the majority of 2 for the latter would have been reversed and made 2 for the former. There were at the next year's election 33,611 more votes cast for the 52 Democratic members of Assembly than for the 76 Republican members. If the representation here had been proportional to the votes, the number of Democrats elected would have been 67 instead of 52, the number of Republicans 61 instead of 76; and the majority, instead of being 24 for the Republicans, would have been 6 for the Democrats.

Turning to other States, we find the following results: in Maryland the Democrats cast 62,357 votes, and elected every member

of both Houses, 111 in number; while the Republicans polled 30,438 votes, and elected nobody. In Delaware the Republicans elected only 2 members by 7,623 votes, while the Democrats elected 28 by 10,980. In Kansas the Republicans elected 108 members by 31,046 votes, while the Democrats elected only 7 by 14,019 votes. In Nevada the Republicans cast 6,480 votes, and elected 51 members; the Democrats cast 5,218, and elected only 6 members. In California the Republicans elected 23 members by 54,592 votes, while the Democrats elected 97 members by a less number, that is, by 54,078. In Vermont 240 Republicans were elected by 44,167 votes, and 26 Democrats by 12,045. In Maine 70,426 Republicans elected 243 members, and 42,396 Democrats only 37. Maryland's Republicans thus cast nearly a third of all the votes in the State, without getting a single representative in either branch of the legislature. In Delaware the Republicans gave over 40 per cent. of the popular vote, and gained but 6 per cent. of the legislature, while in California they gave an actual majority, but gained less than one fifth. On the other hand, the Democrats in Kansas gave a third of the votes, and obtained but 6 per cent. of the legislature; in Vermont they cast 21 per cent. of the vote, and obtained but 9 per cent. of the legislature; in Maine they cast 37 per cent. of the vote, and obtained only 13 per cent. of the legislature; in Nevada, with nearly half the vote, they had but 10 per cent. of the legislature.

Passing now to the National government, we find that the representation in the House of Representatives for the State of New York consists of 17 Republicans and 14 Democrats, though the former received but 416,492 votes, while the latter received 423,365; that is to say, the popular majority was 7,073 for the Democrats, while the congressional majority in the delegation is 3 on the side of the Republicans instead of being, as it should have been, 1 on the side of the Democrats. Taking the whole House of Representatives without the unrepresented States, we find 148 Republicans and 71 Democratic members; the former having received 2,654,048 votes, and the latter 2,037,178; that is to say, the Republicans on 56 per cent. of the popular vote have 67 per cent. of the congressional vote; and the Democrats on 43 per cent. of the former have 32 per cent. of the latter.

In the Senate the representation is still further removed from the people, as the following statement will show.

There are 37 States entitled to 74 senators.

This table gives the vote of the 18 States having the largest

population and entitled to be represented in the Senate by 36 senators: —

New York, 849,750; Pennsylvania, 655,662; Ohio, 518,828; Illinois, 449,436; Indiana, 343,532; Michigan, 225,619; Virginia, 220,739; Massachusetts, 195,911; Iowa, 194,439; Wisconsin, 193,584; North Carolina, 176,324; New Jersey, 162,645; Georgia, 158,926; Kentucky, 155,455; Alabama, 147,781; Missouri, 147,135; Mississippi, 114,283; Maine, 112,822. Total vote, 5,022,871.

The following table shows the vote of the 19 States having the smallest population and entitled to be represented in the Senate by 38 senators;

California, 108,660; South Carolina, 108,135; Texas, 107,780; Connecticut, 98,947; Maryland, 92,795; Tennessee, 82,757; Minnesota, 71,620; Louisiana, 71,100; New Hampshire, 69,415; Vermont, 56,224; West Virginia, 49,397; Kansas, 43,648; Arkansas, 42,148; Oregon, 22,085; Florida, 22,022; Rhode Island, 19,541; Delaware, 18,575; Nebraska, 15,298; Nevada, 11,698. Total vote, 1,111,885.

16 States, with 32 senators, cast 787,310 votes; New York, with 2 senators, cast 849,750.

26 States, with 52 senators, cast 1,948,189 votes; 3 States, with 6 senators, cast 2,024,240.

The city of New York casts more votes than the 6 States of Oregon, Florida, Rhode Island, Delaware, Nebraska, and Nevada.

Before passing from the subject of representation in the National government, let us pause a moment to consider how far the presidential electoral colleges represent the people. At the election of 1868, 214 Republican presidential electors were themselves elected by 3,013,188 votes, while the eighty Democratic electors received 2,703,600 votes from the people; that is to say, the Republicans on 52 per cent. of the popular vote obtained 72 per cent. of the electoral vote; while the Democrats on 47 per cent. of the popular vote obtained only 27 per cent. of the electoral.

These statements serve to show that our practice and our theory are irreconcilable. We must accept one of two conclusions: either our practice or the theory is wrong. According to the latter governments are republican and representative in respect to both persons and corporations — the States.

Turning to the general government is federal, national, and repre- when representation in some of the States was land the Democ That was so in Massachusetts. It is easy to

see how corporate representation began. In England the municipalities were summoned by their representatives to Parliament for the purpose chiefly of granting aids to the crown. In New England the town took the place of the municipality. It was counted as the unit in the composition of the legislature. The representation there was of the towns as corporations, and the majority in each not only ruled in town affairs, but sent a representative to speak for the town in the General Court, or council of towns. But they have changed the theory and the practice. Corporate representation is nearly gone even there, and in most of the States there is not a trace of it. As a general rule, the person is now taken as the unit, for the arrangement of representation in all the States. The National government meantime depends upon the representation of the States in the Senate, and of persons in the House of Representatives. But so faulty are the contrivances for carrying out either theory, that neither in the National nor in the State government is there a representation faithful to the principle on which it rests. Where the representation is intended to be personal, it so happens that some persons only, and not all, are represented. And when the representation is intended to be corporate, that is, in the National Senate, the State may fail of representation, because the senators are chosen by the legislature, which in its turn is, or may be, chosen by a minority of the people of the State.

Our practice thus contravenes the fundamental principle of republican government, which is, that the majority must rule. This principle is essential to the idea of such a government. Where the power resides in all the citizens, the voice of the greater number must prevail, or the minority will rule. This principle, carried to its legitimate result, requires that every question shall be decided by the majority of those in whom resides the ultimate power. As all citizens are equal in rights, the consent of the larger number must necessarily overbear the consent of the smaller number. This, however, is applicable only to the whole governing body; for when you apply it to a body or number less than the whole, you may create a government of minorities. That is to say, when the city of New York is exercising the functions of local self-government, the voices of a majority of her citizens should prevail upon every question; but when she comes to participate in the government of the State, and for that purpose elects representatives to the State legislature who are to vote upon State questions, if the electoral machinery is such as to express only the choice of a majority of the city's voters, the minority is lost. In other words, all the

persons concerned in a question and having the right to decide it should be heard in person or by representation. Therefore, when the question is local, the local majority should govern; but when the question is general, it should be decided by the general majority, and not by local majorities, or a combination of local majorities, which may come to be in effect the same as a general minority.

This can be made plain by the example of a private partnership. Suppose it to consist of 25 partners. In a conflict of opinion, 13 may rightfully control 12; but if it were arranged at the beginning of the year, that the partners should be divided into 5 sections, and each select one of a managing committee of 5 by which the whole business of the year should be conducted; who does not see that each one of the managing committee might be chosen by 3 of the 5 partners in the section, and that thus the whole 5 of the committee would be really the representatives of 15 partners, and a majority of the committee, that is, 3 out of 5 might in fact represent only 9 of 25 partners. Would anything come of such an arrangement but discontent and dissension before the end of the year? What would happen in a private partnership, upon so faulty a scheme of management, does happen, and must inevitably happen, in the State where a like faulty system of government is maintained. I think a careful examination of the irregularities and excesses of our politics will show that most of them have come from our disproportionate representation. The government of a republican country must represent the people, or the people will be dissatisfied. Those who have no voice in legislation, whose opinions are not heard or heeded, will be restive under authority. And it is not the minority only which suffers; the majority suffers also from having no proper or sufficient check, and when at last the scale turns, the revulsion is violent and dangerous. If the anti-slavery minority could have been heard by its representatives from the beginning, increasing in numbers as the minority increased, not only they, but the pro-slavery majority would have been benefited; and who knows but the emancipation of the slaves might have been procured through peaceful legislation, at a cost in treasure, to say nothing of the cost in blood, of less than half the expenditure of the war? With how much less friction would the machinery of government move, if all the parts were carefully adjusted!

Thus far we have looked at the matter in a party light; but that by no means gives us all there is of it. The statutes which proceed from our legislative chambers are often the acts, not of parties or of party majorities, but of schemers and traffickers in legisla-

tion, to whom our present system gives scope. Of the eighteen hundred and one statutes passed by the legislature of New York in the last two years, not a hundred were general, and of these scarce a tenth were passed upon party grounds. We have thus not only a misrepresentation of parties, with its tremendous consequences, but a representation of private interests struggling for private legislation, and converting our legislative halls into scenes of jobbery and intrigue. Under the false pretences of party, the elector is cheated or seduced into voting for one of two men, neither of whom he likes or would trust in the management of his private affairs. He is reduced to a choice of evils, and he makes it under the pressure of party discipline. We all know, that it is the custom for two conventions, supposing, as is generally the case, the division of the electors into two parties, to select each a candidate, and for the voter to choose between the two, or lose his vote altogether. This is the system in its best estate, which supposes the primary meetings to contain only the voters of the party, and the delegates to be fairly chosen, and these in their turn to discharge fairly their own duties of nominating candidates. Such is doubtless the fact in some districts of New York, and in some or perhaps all of Massachusetts. But since there is no legal or adequate provision for the regulation of primary assemblies or nominating conventions, they are in other districts carried by fraud or violence, so that it may be said of not a few, that the scheme there established is for two bodies of incompetent or ill-intentioned men to put up each a man, and for the rest of the community to take their choice between these two. A system so vicious, can beget nothing but vice. The man who thus obtains a seat in a legislative chamber repays the fraudulent instruments of his elevation by defrauding for them, and represents not even the voters whose enforced ballots were cast in his favor, but knots or rings of speculators, office-seekers, and plunderers. It is time to look these evils in the face. The frauds of elections — the illegal voting and the false counting — have grown to be a scandal and a curse. But even these are less than the scandal and curse of legislative corruption. To betray any trust is disgraceful; to betray a public trust is both a disgrace and a crime. No just man, no man of honor, none indeed but a wretch, forsaken of God and accursed of men, can falsify his convictions and give his vote for money or personal advantage. He to whom a father intrusts his daughter for protection, and who abuses his trust by corrupting her, is accounted a monster of depravity; but his crime is less than that of the legislator, who, en-

trusted by his constituents with the great function of representing them in the making of laws, abuses that trust by selling, or bartering, or giving away his vote. And yet the miscreants who do this walk the streets, hold up their heads, look honest men in the face, and even get themselves returned from year to year. How does this happen? The majority does not approve their conduct; it must be a small minority which does. How then do they manage to gain and regain their seats? They do it, not by the free, unbiased choice of the electors, but by the contrivances and tricks of our present system of local or district elections, with their machinery of partisan nominating conventions. Good men have long bewailed these evils, but have failed to arrest them. We see no chance of doing so but through a better system of representation.

The choice of bad men is, however, not the only evil of the system. The good men who find their way into our legislatures are crippled by it. Their influence is weakened and their independence menaced. When one of them opposes a favorite scheme of the party managers of his district, he is sure to receive a warning as well as a remonstrance. Thus the representative and the constituent are both demoralized.

These evils do not spring from a corrupt community. The majority of the people are not debauched. The fault lies in a vicious electoral system, which produces a representation neither of parties nor of the general public, which constrains the majority, and stifles the voices of large portions of the people.

The importance of representation, or rather the evil of non-representation, is measured by the value of popular government. By leaving large numbers of citizens without voice in the State, we not only lose the benefit of their counsel and coöperation, but we make them discontented. The fraud and falsehood of the system beget other frauds and falsehoods, and lower the moral tone of the whole community. The vast power and patronage of government often depend upon a few votes. Need we wonder that force and fraud should both be used to procure them? Parties are themselves deceived by their preponderance in legislatures, without considering how far it rests upon a like preponderance out of doors. The opinions and wishes of large portions of the people are disregarded. They see measures of great significance adopted which they disapprove, but are powerless to prevent, while they are unable to procure a consideration of others which they think indispensable to the general good. If we can devise a remedy, if we can by any means procure an electoral system, by which the

wishes of the whole people will be made known, and the votes of their real representatives taken, on all measures of legislation, we shall have saved the state from the danger which seems now to be impending over it.

Various plans have been proposed, of which we will now proceed to give an account. The problem is, how to procure a legislative body, which at the time of its election will faithfully represent the whole body of electors. The point to be gained is the giving to every elector a representative, so that when the legislature meets the former may feel that he can point to some one on the floor to whom he has given authority to speak and act for him, and that the latter may represent only the voters who had given him their suffrages.

In this country, as I have said already, the basis of representation is generally population, except in the National Senate; that is to say, the representatives are apportioned among the people in the ratio of their numbers. In the National House of Representatives the ratio must be determined by population, instead of electors, because the States differ in the distribution of the suffrage, some admitting more persons and some less to the privilege of voting. In the States the representatives may be apportioned among the electors as easily as among the population. It does not matter, however, so far as the principle is concerned, whether we take the quota of population or of electors, since in either case we adhere to the quota. In this respect, the remedy we are seeking is more easily applied here than it can be in England, where corporate representation so largely obtains. The peculiarity of our system is, that when the quota is ascertained we assign it to given territorial limits, the effect of which is to disfranchise the minorities in the districts, whether the districts be single or plural, since we require each vote to be cast for all the representatives to be elected from the district, be they several or one. What we have to do is, to divorce the quota from the district, either by dispensing with the districts altogether, or by enlarging the districts to the limits of several quotas, and allowing the ballots to be divided, making the number equal to the quota sufficient in all cases to elect a representative.

Speculations on the subject were begun as early as the latter part of the last century. A bill for English parliamentary reform, introduced by the Duke of Richmond in the year 1780, contained a clause looking to a representation of local minorities. In the former part of the present century a scheme having the same object

was broached by the late Mr. Hill. In 1855 a plan, proposed by M. Androe, was introduced into the representative system of Denmark. In 1859 Mr. Hare published his great work on the election of representatives parliamentary, and municipal. Since then the subject has received much attention, and given rise to many discussions in this country, and in England, France, Switzerland, Germany, Belgium, Sweden, and Australia.

Mr. Hare's scheme is one which, for the sake of distinction, may be called that of *preferential* voting. It ascertains the quota by dividing the whole number of voters by the whole number of representatives. Thus, if the number of voters should be 800,000, and the number of representatives to be chosen 200, the quota of voters to each representative would be 4,000. Then the voter is to deposit at the polls a voting paper, on which he shall have placed, in the order of his preference, the names of the candidates, or of so many of them as he pleases. No vote is to be counted for more than one candidate; any candidate receiving 4,000 votes is to be declared elected; if the candidate first on a voting paper fails to obtain the quota, or has already obtained it, the vote descends to the next in order of preference; when a candidate has obtained the quota, his votes up to that number are to be laid aside, and the remaining votes are to be counted for the candidate next in the order of preference, and so on till all the votes are appropriated, and the whole number of representatives is obtained. If there be not 200 persons credited each with 4,000 votes, and the representative body is consequently deficient in number, the deficiency is to be made up by taking the candidates who come nearest to the required quota. This method, which we have called that of preferential voting, is also called by the Swiss reformers that of the electoral quotient (*le quotient electoral*).

A *second* plan is that of *cumulative* voting. The theory of this is, that a quota being ascertained as before, each voter shall have as many votes as there are representatives to be elected (either from the whole State, or from electoral districts less than the State, as may be determined), and shall be at liberty to cast them all for one candidate, or divide them among several, as he pleases. This doctrine has been proposed in Congress by Mr. Buckalew of Pennsylvania, and in the Illinois State Convention by Mr. Medill and disregarded which the Its operation may be illustrated thus: Massachusetts has are unable sentatives in the lower House of Congress; each voter has indispensable he may give them to 10 candidates, one to each, or he we can by ar te them upon a less number than ten, even upon one

One tenth of the voters may so be sure of a representative, if they choose to unite upon one person. Thus, suppose the number of voters to be 200,000, and each with 10 votes, making 2,000,000 votes in all, of which 200,000 shall be sufficient to elect. The friends of any one candidate might secure the concentration or cumulation of the 200,000 votes, cast by 20,000 voters, and these would have a representative, though all the remaining votes were cast for one person. In practice, no doubt, tickets would be made up by the two parties, and each party would send representatives nearly proportionate to its constituency.

A *third* plan is that of *limited* voting; by which is to be understood that of requiring the votes to be cast for a less number of candidates than the whole. Thus, if the number of voters were 100,000 and the number of candidates to be elected from the State or district 10, and each voter were allowed to give only one vote for one candidate, the result would be that every 10,000 persons might have a representative, if they would. This plan is generally mentioned in connection with several candidates, sometimes in connection with single ones.

For example: in what are called the three-cornered districts of England, that is, the districts which send three members to Parliament, it has been provided, that each voter shall vote only for two candidates. And in the late amendment to the Constitution of New York, it is provided, in respect to the first election of seven judges of the Court of Appeals, which election is by general ticket for the whole State, that each ticket shall contain the names of only five candidates. Of course, there will be two tickets, each nominated by a party convention; but the minority party will certainly elect two of the judges.

The *fourth* plan is that of *substitute* voting; which permits candidates to cast anew the useless votes given to them, and substitute a third person in their place. A plan of this sort has been recommended by Mr. Fisher of Philadelphia. Thus, supposing again the number of electors to be 100,000 and of representatives 10, and 10,000 votes to be sufficient for election, and then supposing 6 candidates to have received each 15,000, that is, 90,000 in all, and two others each 5,000. Here are 30,000 surplus votes, cast for the elected candidates, and 10,000 insufficient votes, divided between two persons, so as to give neither of them enough to elect him; the plan I am speaking of allows the six elected candidates to cast the 30,000 surplus votes, and the two defeated candidates to cast the 10,000 insufficient votes, for new candidates.

These eight persons would then substitute four other persons as the candidates to receive the 40,000 votes, and would elect them, to serve with the six first elected.

The *fifth* plan is sometimes called that of *proxy* voting; which permits every voter to give his vote or proxy to any person he pleases, and that person to represent him in the representative chamber if he can unite upon himself other proxies sufficient to make up the electoral quota, and if he receives more than this sufficient number, then to cast additional votes in the chamber, proportionate to the number of proxies received. This is the plan put forth three years ago by the Personal Representation Society of New York.

The *sixth* plan is that of *list*-voting, or what is called the free concurrence of lists, or the open list, a plan recommended by M. Naville of Geneva, as second in merit only to the plan of preferential voting. It supposes lists of candidates containing each the names of as many as there are representatives to be chosen, ranged in the order of preference, to be deposited with the proper authorities a certain time before the election, and numbered. Each elector gives his vote for a particular list. The whole number of votes for that list is divided by the electoral quotient, and the result gives the number of candidates chosen on that list. For example: if there be 15 representatives to be elected, 15,000 voters, and 5 lists of candidates, list A, receiving 5,000 votes, secures 5 representatives; list B, receiving 4,000 votes, secures 4 representatives; list C, receiving 3,000 votes, secures 3 representatives; list D, receiving 2,000 votes, secures 2 representatives; list E, receiving 1,000 votes, secures 1 representative. In case of a vacancy caused by death or resignation, election on more than one list, or other cause, the place is to be supplied by the candidate next in order.

This plan would operate thus, in a State having 100,000 voters and 10 representatives in Congress to choose, and 3 parties with each a list, list A receiving 60,000 votes; list B receiving 30,000 votes; list C receiving 10,000 votes. The quota, or electoral quotient, being 10,000, list A would be entitled to 6 representatives, list B to 3, and list C to 1. The 6 highest names on list A, the 3 highest on list B, and the 1 highest on list C, would then be chosen as the representatives of the State in Congress.

I have given these different plans, in general terms, with very little detail; but sufficient, I think, to show the principle on which each of them rests. They are not always presented in the form in which I have given them. Modifications, greater or less, have

been suggested. But I think I have given the substance of all the plans which have been proposed for the amendment of the electoral system. All of them are large reforms; but they are not alike in merit. That of preferential voting is theoretically the most perfect, and if faithfully executed would give the best representative chamber. It would compel a certain degree of deliberation before voting; would insure to two or more parties proportional representation in the legislature, and would insure a certain degree of non-partisan representation. Whether it would prove, as has been predicted, too complicated in its working among a large constituency, can hardly be determined before actual experiment. I should fear that under it there would be opportunity for much fraudulent counting, and while it would give to each party its proper weight in legislation, it would leave much in the power of party managers. The proxy system would give the most complete representation. The objections to it are that there would be a loss of the deficient votes; that is to say, the votes given for a candidate who could not concentrate upon himself sufficient to make a quota, would be thrown away, unless a transfer to other candidates were permitted. Preferential voting avoids both the objection of too great concentration of votes upon one person, and the loss of votes below the quota, since no candidate can have counted in his favor more than enough to elect him, and every vote will be counted, except the number less than a quota left after electing all of the required number of candidates. Other difficulties, however, might appear in the actual working of any of the plans, which we do not now foresee.

Indeed, though I am confident that any one of them would go far to purify our elections and our legislation, I think the preference among them can only be decided by actual experiment. Some of them may be best in a large constituency, and others in a small one.

If I might choose which to begin with, and where to begin, I would try the plan of cumulative voting for members of Congress in the State of Massachusetts, and that of limited voting for aldermen in the city of New York, restricting in the latter case each voter to one candidate. The former might require concurrent legislation of Congress and of the General Court; the latter, only an Act of the New York Legislature. In either case, the process would be simple enough. To begin with the congressional election in Massachusetts, which sends 10 members to the House of Representatives, and has about 200,000 voters. Every voter would give 10 votes, which he might scatter among 10 candidates, or cumulate

them upon a less number, even upon one. The whole number of votes to be counted would be 2,000,000. Parties are divided between the Republicans and Democrats in nearly the proportion of two thirds to the former and one third to the latter, giving the Republicans about 134,000 voters and the Democrats about 66,000, though the latter have not a single member of Congress. Each party would calculate its strength beforehand, and nominate as many candidates as it was confident of electing. If the Republicans were to nominate a full ticket of ten candidates, they could give each only 134,000 votes; while the Democrats, if they nominated four candidates, could give each of them 165,000 votes. The result would be that the Republicans would nominate only 7 or 8 candidates, and the Democrats 3 or 4. There would also be an opportunity for any number of voters wherever obtained throughout the State, not less than 20,000 in all, to elect their own candidate, without regard to either party. If by any chance, a most improbable one, the votes should be cumulated upon a less number of candidates than 10, a new election would have to be ordered to supply the deficiency.

Then in regard to the trial of limited voting for aldermen in the city of New York, the process would be this. Supposing 15 aldermen to be elected by general ticket, which is the scheme of the new charter just enacted by our legislature, each voter should be limited to one candidate, and each ballot should have only one name upon it. There being about 150,000 voters in the city, every 10,000 of them, wherever residing and of whatever party, might have a representative in the chamber of aldermen. If there should happen to be a large concentration of votes upon one person, that would not be a very great evil, since it could scarcely happen that there would not be candidates sufficient to fill the board. If that very improbable event should come to pass, a new election would supply the deficiency. In practice, parties would probably distribute their tickets about the city in such manner as not to waste their votes.

That these changes would be great improvements upon our present system, I venture to think I have already shown. If irregularities or difficulties should appear in the practical working, — and such are likely to occur in the introduction of any new scheme, — they can be remedied afterward, as occasion offers. When once the theory of proportional representation is reduced to practice, and made familiar to the people, it will assert its superiority. If one of the methods of practical application is found imperfect, it will give

way to another and better. All the plans which have been explained, are kindred in general theory and in purpose. Any of them would give to a minority party a representation proportional to its numbers; and most of them would give to electors who are not partisans an opportunity of being heard and felt in representative halls. The elector would be independent of party in his choice of a candidate; and the person elected without a party nomination would be beyond the domination of nominating conventions or party managers. Even these would be put upon their good behavior, by the knowledge that their favor was not essential to the success of any person; and their candidates, being placed in competition with men independently nominated, would have to be selected with more attention to their fitness. Any person who has the confidence of a quota of electors could be elected to represent them, whatever party, or partisan tool or master, might say. No bully of the primaries, no tempter of the lobby, no hound of party would have dominion over him.

We boast that a popular representative republican government is the best in the world. It has been already shown how far in practice we fall behind our theory. To this cause is due in no small degree the corruptions, gross and monstrous, which oppress us. We have saved the life of the nation in its struggle with slavery and rebellion. We have now to save it from another enemy more subtle and not less formidable, official and electoral corruption. There is no time to be lost. Let us begin at once.

THE RELATIONS OF THE BUSINESS MEN OF THE UNITED STATES TO THE NATIONAL LEGISLATION.

Read at the General Meeting in Philadelphia, October 26, 1870. — By Hamilton Andrews Hill.

While the spirit of class, like the spirit of sectionalism, in certain of its manifestations, ought always to be discouraged and condemned, there can be no question that every class in a nation, like every section of a country, has peculiar interests of its own, which, unless it shall concern itself about them, will probably fail to receive proper consideration, and that it has also duties to perform to the State, growing out of its own conditions and relations, which cannot be misunderstood or neglected by it without public loss.

For the purposes of the present discussion, the people of the United States may be divided into four classes, the professional, the agricultural, the mechanical, and the commercial. We have no non-industrial class among us; we are all workers, either of necessity or by choice, and almost every man may be appropriately assigned to one or another of the groups mentioned.

In the professional class, we should include all those who study, practice, or teach in the departments of divinity, medicine, or law, or in the arts and sciences, also all other literary men and educators, and all who belong to the army or navy; in the agricultural class, those who devote themselves to the cultivation of the soil; in the mechanical class, all artisans and artificers; and in the commercial class, all who are engaged in the manufacture, transportation, or distribution of commodities, or in the regulation and control of money and credit, which lie at the foundation of all mercantile exchange. It is to the last of these that we propose to invite attention in this paper, and an inquiry will be raised as to the relations which the commercial class sustains to the community as a whole, the extent of the dependence under which it rests, on national legislation, and the degree to which it ought to participate, first in its own interest, but sec-

ondly and especially in the interest of the nation, in framing this legislation.

In inviting the American Social Science Association to engage in such a discussion as is thus indicated, it may be opportune to recall the circumstance that the Association of Chambers of Commerce of Great Britain, comprising within its membership nearly all the influential commercial bodies of that country, was brought into existence as the consequence of a suggestion made by the presiding officer of the Social Science Congress at its Bradford meeting ten or eleven years ago. It may safely be affirmed that if any suggestions shall emanate from the American Social Science Association, which may serve to quicken the activity or to widen the influence of the business men of the United States, and of their local and national Chambers, they will be cordially welcomed and carefully considered.

Let us inquire more particularly concerning the commercial class as we have designated it. It embraces all manufacturers, miners, importers, wholesale and retail dealers, ship-owners, managers of transportation lines by land or by water, railroad proprietors and officials, capitalists, bankers and brokers, and all employed by them. Its importance numerically should not be overlooked. The present population of the United States is about forty millions of souls; it is estimated that of this number thirty-three per cent., or upwards of thirteen millions, are in receipt of an income, and eleven millions add directly by their labor to the wealth of the country. These eleven millions may be subdivided with approximate accuracy as follows: agriculturists, six and a half millions; mechanics, one million; laborers, one million and a half; and the commercial class, as already defined, two millions, or eighteen per cent. of the whole.

But this statement falls far short of illustrating the relative importance of the class under consideration, as we shall see if we glance at the nature and scope of its operations. It keeps afloat four millions of tons of shipping under the American flag, employed on the inland waters of the country, along the coasts, and upon the ocean. It has built fifty thousand miles of railway, over which forty-eight millions of tons of merchandise pass annually, not including coal. It has constructed one hundred and twenty-five thousand miles of telegraph lines at a cost of nine millions of dollars. It controls the export and import of merchandise valued for the last year at nine hundred millions of dollars. It

produces from the spindles, looms, forges, and benches of our numberless manufacturing establishments the value of from five to six hundred millions of dollars a year. It directs the operations of sixteen hundred banks, scattered all over the country, the paid-up capital of which is four hundred millions of dollars, and the resources of which amount to a billion and a half. But this is not all. The industry of the mechanic and laboring classes relies largely, if not mainly, on our merchants, manufacturers, and capitalists; while the entire product of our national agriculture, valued at more than three billions of dollars, enters the domain of commerce almost immediately after its in-gathering, and is altogether dependent on the commercial class for the money which enables it to be brought to the home market or shipped abroad, no less than for the vessels or railways by which it is conveyed, or for the elevators or warehouses in which it is stored. In a word, the total product of the industry of the people of the United States, estimated for last year at six billions eight hundred and twenty-five millions of dollars, does no more than measure the scope and extent of the influence exerted by business men in one way or another, directly or remotely, sooner or later, on the material prosperity and development of the nation.

"The merchants of a country," says Lord Bacon, "are *vena porta*, and if they flourish not, a kingdom may have good limbs, but will have empty veins, and nourish little." Is not this emphatically true among ourselves in the United States?

We need hardly stop to explain how closely dependent these commercial and other related interests are upon the national legislation for their welfare and security. It is true that no legislation however hostile, could annihilate the vast annual product of our industry. Our business men have often prospered in the past in spite of Acts of Congress, and they will probably do the same in frequent instances in the future. Legislation has not made this nation what it is, commercially or otherwise; and legislation will never unmake it. At the same time, it may do, and, as we know, has at various periods done much to quicken or to retard commercial progress; to encourage or to embarrass the efforts of business men; to give confidence to, or to frighten capital. Sometimes it is negative, sometimes positive in its character, but in all cases it will be potential in its effect for good or for evil. If under given circumstances, no legislation is what is required, as when the merchants of France, in reply to a question from Louis XIV., as to what he could do for them, said, "Let

us alone:" then any interference whatever will only work mischief. On the other hand, if the fostering care of the government is needed permanently or temporarily by a particular branch of industry, then to fail to legislate in its behalf, will prove mischievous, and to fail to legislate intelligently and judiciously, may be hardly less hurtful. If also, in the progress of affairs, it becomes necessary to change a long established policy in relation to some one or more branches of commercial enterprise, then, to adhere tenaciously to legislation once justifiable but now obsolete, is sure to be injurious, and in particular instances may prove fatal.

Who can estimate the extent to which our domestic exchanges are influenced by the action of Congress from time to time, on the subject of the currency? The exchangeable value of the billions of our annual products, may be determined in one direction or the other, by the adoption of a particular policy of expansion or of contraction. The consequences of a serious error in finance at Washington, will in the process of time be felt in every bank, every warehouse, and every village store, and in every farm-house in the United States; and this being so, how many of our population will escape from them? Upon our tariff legislation, whether in its provisions it be stable or fluctuating, simple or complex, moderate or prohibitory, depend, for both the method and the extent of their increase, our multiform manufactures in leather, iron, cotton, wool, wood, and other materials. Our established position as a competing maritime power upon the oceans of the globe, the traffic on which is regulated by unchanging and universal principles and not by municipal rules, must always be decided in the long run by the degree of harmony which we succeed in securing between what we call our navigation laws and those principles. Questions are arising in reference to internal improvements, the relation of the General Government to them, their amenability to national control, and their right to claim the aid of the national treasury, and upon the manner in which these questions are answered, the permanent efficiency of the transportation service of the country hinges.

There can be no doubt that from this time forward, it will be incumbent upon Congress to devote its time and thought chiefly to the material interests of the nation. Fortunately we are so completely isolated from the other great powers by our geographical position, that we need not involve ourselves in their misunderstandings, jealousies, and quarrels. Still more fortunately, our own internal dissensions upon subjects purely political and governmental, have so far abated that we may hope soon to see substantial and

practical accord upon them among all intelligent and patriotic citizens. What remains for us then, but to set ourselves diligently to the solution of the problems bearing upon the development of the national resources? This is now the duty of the people, and it is especially the duty to which Congress is called, in order that the national wealth may be increased in every direction, and to the utmost possible extent. Nor is this an unworthy or sordid end, if properly understood. What is a rich nation? Assuredly, not of necessity a nation in which there are numerous instances of large personal accumulation or acquisition. A nation may contain many very wealthy men, and yet be poor; it may contain very few, and yet be rich. To entitle it to be called rich, it must possess large aggregated wealth, and the more equally this is diffused among all classes of its population, the greater its prosperity. We want to raise the general standard among ourselves, of comfort, of intelligence, and of morality, to the highest practicable point; and, to secure for the millions of our fellow-citizens, native or adopted, now dwelling on this continent, and for the millions more who will inevitably come hither, whether we desire it or not (perhaps in greater crowds than ever before), opportunity for labor according to individual fitness or preference, adequate remuneration, and the possibilities of home. Who shall say that this purpose is not worthy of the choice and devotion of every American citizen, whether he be in private or in public life? Grander than any epitaph carved on the tomb of military conqueror or hero, is the inscription on a monument raised to commemorate the public services of one of England's greatest and purest statesmen: He gave the people bread.

We have endeavored to show the extent and value of the material interests represented by what we have termed the commercial class of our country, the importance of these interests to the entire population and to the national prosperity, and the manner in which they may be affected, favorably or adversely, by legislation. We have said also that it has become the duty of Congress to direct its thought and attention chiefly to their protection and promotion. It is proper now to inquire concerning the adaptation of Congress as at present constituted, for sustaining the responsibilities, and for performing the services which all this implies.

At the time of the adoption of the Federal Constitution, it seems to have been anticipated that the representative body would be composed of "land-holders, merchants, and men of the learned professions," and the opinion was expressed that "there was no danger that the interests and feelings of the different classes of citizens

would not be understood and attended to by these three descriptions of men." But it could hardly have been foreseen that a branch of one of these classes, a single one of the learned professions, would attain so large a preponderance in numbers and influence over all others, as we find that it has done. We refer of course to the profession of the law. In the Senate of the United States at the present time, out of seventy-two members, forty-four, or sixty-one per cent., are members of the bar, while nine only, or twelve and one half per cent., are connected with trade, transportation, or finance. The proportion is precisely the same in the House of Representatives, in which, out of two hundred and thirty-eight members, one hundred and forty-six are lawyers, and thirty-one are members of the commercial class in its broadest definition.[1] It would be a liberal estimate to state the number of lawyers in the country in 1870 at forty thousand; the number according to the census, in 1860, was thirty-three thousand one hundred and ninety-three. Assuming it to be forty thousand now, the profession of the law contains one tenth of one per cent. of the population, while its representation in the National Legislature equals, as we have seen, sixty-one per cent. At the same time the commercial class, comprising within itself eighteen per cent. of all those who add directly to the wealth of the country by their industry, and five per cent. of the entire population, has a representation in Congress of only thirteen per cent. De Tocqueville said, thirty or forty years ago:

"If I were asked where I placed the American aristocracy, I should reply without hesitation, that it is not composed of the rich, who are united together by no common tie, but that it occupies the judicial bench and the bar."

And again: —

"The lawyers of the United States, form a party which is but little feared and scarcely perceived, which has no badge peculiar to itself, which

[1] From the second edition of the *Congressional Directory*, we have compiled the following table, showing the occupation of the various members of the Forty-first Congress:

	Senate.	House.	Total.
Lawyers	44	146	190
Merchants	9	31	40
Editors	5	11	16
Planters and Farmers	5	18	23
Clergymen	1	1	2
Soldiers	2	1	3
Teachers	1	2	3
Physicians	–	2	2
Miscellaneous	5	26	31
	72	238	310

adapts itself with great flexibility to the exigencies of the time, and accommodates itself to all the movements of the social body; but this party extends over the whole community, and it penetrates into all classes of society; it acts upon the country imperceptibly, but it finally fashions it to suit its purposes."

We will not pause to consider the statement of the distinguished writer from whose work on Democracy in America we have quoted, that the influence exerted by members of the legal profession is the most powerful existing security against the excesses of democracy; for we are now inquiring concerning them as a legislating rather than as a ruling class. The considerations presented by this author, however, to account for their social and political influence, will illustrate, with slight modifications, the reason why they have become the dominant class in legislation:

"Men who have more especially devoted themselves to legal pursuits, derive from those occupations certain habits of order, a taste for formalities, and a kind of instinctive regard for the regular connection of ideas, which naturally render them very hostile to the revolutionary spirit and the unreflecting passions of the multitude.

"The special information which lawyers derive from their studies, ensures them a separate station in society; and they constitute a sort of privileged body in the scale of intelligence. This notion of their superiority perpetually recurs to them in the practice of their profession; they are the masters of a science which is necessary, but which is not very generally known; they serve as arbiters between the citizens; and the habit of directing the blind passions of parties in litigation to their purpose, inspires them with a certain contempt for the judgment of the multitude. To this it may be added, that they naturally constitute *a body;* not by any previous understanding, or by an agreement which directs them to a common end; but the analogy of their studies and the uniformity of their proceedings connect their minds together, as much as a common interest would combine their endeavors."

We have no disposition to call in question the peculiar fitness of able and experienced practitioners at the bar, in view of the special training received by them during preparation for and in the practice of their profession, for participation in the duties of legislative bodies; nor will we raise an issue as to the relative rank among their legal brethren, of members of Congress who are lawyers, although we have sometimes heard from that source sharp criticisms in reference to both their professional and their general standing. Carefully avoiding all personal allusions and reflections in the course of what we have to say, we will admit that these men, as a whole, fairly represent the average respectability and

learning of their class. But we cannot concede that legal studies and attainments are the sole or chief qualification for legislative service, or that any sound argument can be deduced from their possession to prove that it is desirable that lawyers should be so largely in the majority in Congress as for many years past they have been and as they now are.

However well qualified lawyers may be by training and experience to deal with general principles, they must often lack that practical knowledge of affairs, which is essential to the right and opportune application of principles, and to the working out of details in commercial legislation. They are obliged, therefore, to rely upon others for much of the information which they require, and if they have to go for this beyond the limits of their own body, they obtain their knowledge under many disadvantages. Hence, in part, the reason why Congress has been so slow, as the commercial class feel that it has been, to deal with some of the problems growing out of the war of the rebellion. Few of its members, comparatively, possessing any practical knowledge of business, the majority have been compelled, in various ways, to solicit expressions of opinion promiscuously from individuals or corporations in their constituencies, and these expressions have been so various and so contradictory, given from so many different view-points, and prompted by such conflicting motives, that Congress, having no convictions of its own, well-defined and matured, intelligently formed and confidently held, has been unable to unite upon a commercial or financial policy calculated to meet the approval of the country, or to relieve the embarrassments under which various interests are now suffering.

We cannot, however, treat our subject properly without looking at Congress, as at present constituted, in another aspect. We have spoken of it as containing lawyers and men of business in certain proportions to the entire membership. Another class is represented in it, which we shall find to be still more numerous and more all-controlling even than the legal profession; we mean the politicians. The census returns do not indicate how many politicians there are in the United States, but it may safely be assumed that the aggregate would not vary very widely from the given total of all the male population who have come to years of understanding, *plus* an unknown quantity representing a number undetermined but evidently on the increase, among the other sex. If all who talk politics and who feel personally interested in them, ought to be represented in that capacity at Washington, perhaps,

in one view, Congress may be said to be properly constituted. But, there is a difference of opinion among our people, as to what politics are, and wherein political duties consist. There are some who define politics as consisting in the knowledge or the practice of conducting the various affairs of a state or nation, as the science of government; and, as patriotic men and women, they feel that they ought to concern themselves about every question relating to the management of public affairs, and bearing upon the safety, honor, and prosperity of the nation. Nothing could be more noble than this, and it is greatly to be regretted that the word politics should have come to signify among us anything different or less worthy. But, unfortunately, there are those who understand by it the views, the measures, and the policies of political parties, and who confound political intelligence and activity with partisan shrewdness and zeal. We will not undertake to say precisely how many of the three hundred and ten senators and representatives at Washington are politicians in this latter sense; but there are altogether too many such, rightly to represent the people at large, and too many for the public good. We believe that our citizens generally, certainly the more intelligent and pure minded, regard party organizations as machinery which it is convenient to employ in carrying forward national affairs, but which after all is machinery only, and therefore of subordinate and subsidiary value. As man is worth more than all institutions, so the government is worth more than any or all parties. This is too apt to be forgotten by those who have in charge the regulation of party affairs, and the promotion of party ends; and we greatly fear that it is forgotten by many of our public men, members of Congress not excepted. In this, as we judge, the most alarming element in the character of Congress, as it exists to-day, is to be seen. We have more to apprehend from the predominance there of the politicians than of the lawyers. Were the two houses composed entirely of lawyers, supposing them to be men of ideas and convictions, men of high personal character and of repute in their profession, men of pure motives and unselfish aims, thoughtful not so much of themselves or of their party as of their country; undesirable as this would be, we hesitate not to say, that the general interests of trade and commerce would be immeasurably safer than if Congress were filled with business men, chosen, not as such, but as party politicians to promote party interests, and to struggle only for party supremacy. The most dangerous men among us are those office-holders, whether lawyers or merchants, who are politicians in the

worst use of the word, because all such lower the standard of qualification for public service, and generally misapprehend and undervalue the true interests of the people. Such men too, are often, if not necessarily, corrupt; and if in an official capacity they are brought at length to take up questions of pressing commercial importance, they are likely to do this from unworthy motives, and, feeling no deep sympathy for the cause in behalf of which they are called to legislate, they will probably content themselves with temporary, superficial, and half-way measures. Hence perhaps the chief reason why there is so much difficulty in securing wise legislation in behalf of interests which are vital to the best and broadest prosperity of the country, but which do not appear to be demanded by party considerations or to be necessary to party success. It is true, they may affect more or less directly two millions of people, and indirectly the entire population; but their importance being unappreciated by those who control the party organizations, and their requirements being matters of business rather than of sentiment, they fail to awaken any wide-spread enthusiasm, they suggest no popular watchwords or party cries, and they are therefore laid aside or hurried over for subjects out of which more political capital may be made, and upon which more exciting harangues may be delivered.

It is to a Congress thus comprising professional men not versed in the practical details of business, and politicians too often indifferent to these subjects, that the merchants of the country are obliged to have recourse for legislation in reference to our material interests. As has been intimated, the late civil war disturbed in various ways the course of our domestic and our foreign commerce. Political reconstruction having been secured, our business men now desire a careful review and readjustment of all the legislation of the last ten years relating to general business and finance, in order that the conditions of trade may be restored as fully and as rapidly as practicable to the *status quo ante bellum*. They desire also a thorough examination of our navigation laws, and other commercial statutes enacted in years long past, for the purpose of ascertaining whether in any essential particulars modifications are needed to make them conformable to changes which have taken place in our own circumstances, or in those of other nations. More than this, they ask that a commercial policy be devised and adopted, which shall be broad, flexible, liberal, and comprehensive, free from all suspicion of sectionalism, recognized in its essential principles by both political parties, and worthy of

transmission from one administration to another. But how shall Congress be brought to understand and to sympathize with the commercial class in these desires? Our merchants cannot explain all their views by correspondence; and if they visit Washington for the purpose, they find themselves in corridors crowded with office seekers, with men having personal and selfish schemes to promote, and with professed lobbyists, or they chafe in anterooms, as did Dr. Johnson when waiting to see Lord Chesterfield. If they obtain admission to the committee rooms, they find the members preoccupied and pressed for time, and they have to explain themselves briefly and hurriedly; their motives are liable to misconception; and they are often treated with indifference, sometimes with positive rudeness. Is it strange, then, that they decline to place themselves in a position at once so thankless and so unpleasant?

For this state of things what remedy shall we propose? How shall Congress as a body be brought rightly to understand the financial and commercial wants of the nation, and wisely and adequately to legislate in view of these wants? Answering this question generally, we should say that we must be more rigid and exacting in the selection of candidates, putting forward only men of recognized character, ability, and experience, and choosing only those who are both competent and willing to be the leaders of public opinion, and who will have sufficient confidence in themselves and sufficient independence to initiate measures of reform, instead of waiting until the nation, after a long and patient endurance of evils, can be aroused to unite in demanding their removal. Our subject, however, requires us to be more explicit than this, and it suggests the nature of the specific fitness which must be insisted on certainly in a fair proportion of those who are to constitute the Houses of Congress. It teaches us that we must send a larger number of thoroughly trained, first-class business men to Congress, and especially to the lower branch, than we have of late been in the habit of doing. If it be true, as has been stated, that from henceforth the paramount duty of Congress will largely be to pass upon questions relating to finance, the tariff, ocean commerce, railway transportation, and kindred topics, the most natural course to pursue to insure proper action thereupon would seem to be to elect to seats in Congress, bankers, manufacturers, merchants, and railroad officials. Far better to introduce the practical knowledge and experience of such men into the body itself, than to attempt to infuse into it any informa-

tion by means of written communications or hearings before committees. If the condition of a bank, or a factory, or a railway become embarrassed, it is customary in the commercial world to select some man especially skilled in the banking, manufacturing, or railway business, as the case may be, to retrieve if possible the position of the failing institution, or, if there must be disaster, to make this as light as possible. Under such circumstances no one would think of selecting a man to stand at the head of a corporation who could bring no practical knowledge to the performance of his duties, and whose only claim to such a position was based on a legal education or good standing in a political party. And yet we are in a measure intrusting the welfare of sixteen hundred banks to men to whom we would not confide the management of any one of them. We are placing the well-being of our whole manufacturing system in the hands of men whom we would not put in charge of a single mill. We are sending men to frame our navigation policy, whose advice we would not accept in reference to the model of a ship, or the merits of a sea-captain or mate. We are charging men with the transportation interests of a continent, who would be utterly incompetent to manage one of our shortest railway lines. Of course we shall not be understood as urging that every legislator should possess in himself the requisite qualifications for each one of the positions to which we have referred; that would be absurd. Nor can anything we have said be construed as intimating that every legislator should be competent to fill some one or other of them. We do not desire to see the Halls of Congress occupied exclusively by the commercial class; we would simply recur to the original idea of the framers of the Constitution, which was, as we have said, that the representative body should consist in the right proportions of members of the learned professions, business men, and landholders or agriculturists. We expect that in Congress, as well as in other legislative assemblies, there will always be a large number of lawyers, and we shall be content to have it so, if only the best men at the bar are chosen; but we claim that side by side with them should sit merchants and other members of the commercial class, and in about equal numbers. There ought to be not less than one hundred of these men in the House of Representatives to-day. All the large cities of the Union, should, in part at least, be represented by them, They should be selected, not because they are party politicians, and are therefore available, their occupation as business men being the accident or incident;

but distinctly for the reason that they are business men and not partisans at all. The influence for good of such a body of men in rightly moulding and shaping our commercial legislation, it would be impossible to estimate.

Since the passage of the English Reform Bill in 1832, the House of Commons has been the true governing power in Great Britain; and the governing power in the House of Commons, in everything relating especially to trade and commerce, but by no means to these subjects alone, is just such a body of practical men as we have alluded to, bankers, merchants, and manufacturers, who sit for London, Liverpool, Manchester, Birmingham, Leeds, Sheffield, Huddersfield, and other large manufacturing and commercial towns, and who, differing more or less on political matters, are substantially agreed among themselves in reference to the general commercial policy of the nation. Before the passage of the Reform Bill, these important communities were altogether overshadowed in the Government by the landed interest and by the "great families." Many of them, Manchester, Birmingham, Leeds, Sheffield, and others, were not represented in the House of Commons at all.[1] But, as soon as the representation was enlarged, the electors of the places referred to sagaciously returned prominent and successful business men to look after their interests and the interests of the country, in Parliament, and they, in connection with many honored members of the legal profession and of the aristocracy, have carried through all the reforms of the last thirty years, and have contributed more than any others in modern times to make England what it is. For the Reform Bill was simply the key to all the great measures, which, subsequently to its passage, have triumphed in Great Britain. In the language of the Historian of the Peace, the people made up their minds "that the shortest and only safe way of procuring all reforms and all good government was by making the representation as true as it could be made." This rendered it possible for Richard Cobden, and others like him, to enter the House of Commons, and for John Bright to occupy a seat in the Cabinet. And now, as we are informed, from one third to one half of the present members of the House of Commons are directly connected with trade, and the number is constantly increasing. The same element is beginning to enter into the composition of the House of Peers. Lord Belper, better known perhaps as Mr. Strutt, is a great manufacturer at Derby; Lord Overstone is Mr. Jones Lloyd, the

[1] Manchester and Leeds were represented in Parliament for a short time under the Protectorate.

banker; Lord Dudley is one of the largest iron masters in the country, and the Marquis of Salisbury is surpassed by few in his practical knowledge of railways. Nearly one half the members of the present government are connected with business, either personally or by descent. Mr. Gladstone, the premier, is the son of a merchant; Mr. Forster is a manufacturer of stuff goods; Mr. Bright of carpets, and Mr. Baxter of coarse linens; Mr. Goschen is a banker, and Mr. Bruce a proprietor of mines. The Duke of Argyll, also a cabinet minister, has placed two of his sons in clerkships, one in a banking-house, and the other with a mercantile firm in the China trade; and, if it be true, as reported in the papers, that his eldest son and heir is about to marry one of the princesses of the Royal Family, it is not impossible that a few years hence a sister of the King of England will have one or more brothers-in-law participating actively in business affairs. All this illustrates the controlling influence which the commercial classes have already attained, and of which we see practical results, in the perfection which has been reached in the administration of the post-office, the occupancy of every ocean in the two hemispheres with steamship lines, the efficiency of the railway service, the extension of telegraphic facilities, and other advantages which have proved of incalculable advantage to all classes of the people of Great Britain, and have so greatly stimulated both their home and their foreign trade. We might go further, if our limits permitted, and speak of the power which these business men wield in the solution of the social problems of the day, in ecclesiastical reform, and in foreign affairs. Certain English writers, accomplished and fastidious, schoolmen rather than men of the world, affect to lament this state of things, and speak almost as if England were going to ruin under this domination of the commercial class; but we who from this side of the Atlantic watch passing events there, can hardly fail to estimate the value of the influence exerted and of the service performed by its representatives; and we anticipate still more marked and beneficent results from their common sense method of investigating, and their practical way of handling almost every question upon which they are called to legislate, whether of political economy, social science, or diplomacy.

We have a condition of affairs in the United States somewhat analogous to that existing in Great Britain before the passage of the Reform Bill; and if what has been stated in this paper is correct, there is something seriously defective in our system of representation, not indeed because there is anything wrong in the

Constitution, but as the result of long usage and repeated default. For the landed aristocracy, we have the legal profession and party politicians; for the rotten borough — Gatton or Old Sarum — we have the caucus[1] and the ring; for personal and family nomination, we have nomination by irresponsible committees and by cliques. Is it not true that our leading commercial communities are exerting little if any more influence at the Federal Capital, than did Manchester, Birmingham, and Leeds, in the House of Commons forty years ago? Lord Grey said, "Representation, not nomination, is the principle of the Reform Bill," and this we think illustrates the precise character of the change which we in our turn shall be required to make. We must secure a fair and proper representation of all the great national interests in the Halls of Congress, and, as a means to this, a wise selection of truly representative men to serve us there. Our brethren in England have reached their present parliamentary position through a conflict which, during its continuance, shook their governmental fabric to its foundation. "With a great price" obtained they their freedom; but we are "freeborn." It is not our Constitution, but ourselves, that we need to reform; it is not our laws, but our method of procedure under them, which we must amend. If the object to be attained be worthy, we can hardly shrink from the effort which will place it within our reach.

Three inquiries present themselves here, suggesting some of the difficulties to be overcome; and, in replying to them, we shall endeavor to develop the course, which in our judgment should be taken to reform our Congressional representation: How can we secure the election of a proper number of commercial men of the right kind? How can we obtain the consent of such men to serve? How shall we guard against the choice of men who, being actively engaged in business, will yield to the temptation to use their legislative position to promote their personal gain.

How can we secure the election to Congress of a proper number of commercial men of the right kind? We have said that in our opinion there ought to be one hundred of them in the House of Representatives to-day, sitting for the great commercial constituencies. How can they be placed there? This is a matter in refer-

[1] If to any one, we should seem to speak with undue disrespect of this institution of our country, we would shelter ourselves behind a name which is its own sufficient authority wherever it is known. Whittier, in his poem entitled *The Panorama*, describes a slave auctioneer in part as follows:

> A squire or colonel, in his pride of place,
> Known at free fights, *the caucus*, and the race.

ence to which the business men of these constituencies must bestir themselves; they may not be really more deeply interested in the character of the legislation enacted at Washington on subjects relating to the material welfare of the country, than are men in other walks of life, but they are so apparently, and the majority of their fellow-citizens believe them to be so in fact. With them therefore rests the responsibility of taking the first steps in the direction of reform. That they have the power to carry the point there can be little doubt, if they will use proper means. Numerically, as we have seen, they are not weak. We have estimated the commercial class in the United States, employers and employed inclusive, to be eighteen per cent. of the total of real producers; it is of course the strongest proportionately, in the communities in which it is proposed that its influence for reform shall be exerted. But it possesses another element of strength; it holds the purse strings which it is necessary to untie at the commencement of every political canvass. Nearly all the money raised in the cities for party purposes is contributed by business men and capitalists, and it would be quite legitimate for them not only to insist, when making their subscriptions, upon a due recognition of their class in the nominations to be presented to the people, but also, if their just claims and reasonable expectations fail to be met, to quietly allow those who thus overrule their preferences, with their supporters, to pay all the election bills. Their moral power, however, would be their greatest source of strength; they would be heartily sustained by the best men in the learned professions, and by thoughtful citizens of every class. A movement to obtain proper representation in Congress for the monetary, manufacturing, importing, and transportation interests, would be seen to be so just in itself, and so desirable for the country at large, that it would receive prompt and hearty approval and coöperation on every hand.

The local Boards of Trade and Chambers of Commerce are educating business men for legislative service, and they are beginning to create a public sentiment which will sustain them in this service when they shall enter upon it. They cannot be safely used in their character of commercial organizations, for making nominations or carrying elections, but they will be found to be of much use indirectly. The individual members know each other, understand each other, and estimate each other, generally, at about the right value. Their acquaintanceship, and their habit heretofore of consulting and working together, have prepared the way for further concert of action; so that outside of their organizations, but closely

related to them, they are in a situation to form in every large business community a nucleus for a movement in favor of representative reform, which, with proper effort, will rapidly grow and finally prevail. The present time is favorable for commencing such a movement. The issues between the two political parties are less sharply defined than they have been for many years, and there seems to be a growing disposition on the part of moderate men on both sides to work together. If, therefore, the members of the Boards of Trade and Chambers of Commerce will informally meet each other for consultation, manifesting a conciliatory and unselfish spirit, and subordinating all personal and party preferences to the public good, if they will agree among themselves in reference to the man or men who are best fitted to act upon commercial questions in Congress, and if they will firmly insist upon the nomination of such, and of such only, it will not be long before their expressed wishes will be regarded, and they will have the satisfaction of seeing themselves, their class, and the enterprise and industry of the country fairly represented and properly cared for. They will not accomplish their purpose all at once; it will be less difficult to succeed in some constituencies than in others, but every additional commercial man sent to Washington will make it the more easy to elect others.

This brings us to the second inquiry: How can we obtain the consent of the men whom we wish to nominate and elect? We admit that this is a more serious difficulty than that which we have just been treating; for with the acceptance of a nomination by an unexceptionable candidate in any commercial constituency in which the business men are earnest and united, the battle will be more than half won. But the trouble is, the men upon whom we should all be likely to agree, would generally be those who would most hesitate to enter Congress. In the first place, with many of them, going there would involve some pecuniary sacrifice; they would have to leave their business affairs altogether for months at a time, and they would have to divide their attention between their public and private duties, even when at home. Still, we think, that under certain circumstances, enough of such men could be induced to forego personal advantage, at the solicitation of their brother merchants, supported by their fellow-citizens generally, to represent the more important constituencies. There is such a thing as disinterestedness in the world, and there is a proper ambition in the heart of many a high-toned man which will prompt him to serve his country when called to do so by the unsought suf-

frages of his associates, and when there seems to be a probability that his efforts will be appreciated, and in a measure successful; one or both of these considerations might be expected to influence favorably those whom we should ask to represent the commercial class in the national councils. We know that our most experienced and successful business men are constantly induced to accept new responsibilities, from which they would gladly excuse themselves, were it not for what they conceive to be their duty to their friends or to the public. It is hard to have to believe that convictions of what the necessities of the country require, confirmed by a knowledge of what is desirable for local interests also, will not induce men to make a temporary sacrifice for the sake of the results which they may hope thereby to achieve. But there is a lower ground on which an argument might be based, and it ought to be mentioned, although let us hope that it would not be necessary to make use of it in urging upon business men their duty to take part in legislative affairs. They have a very direct personal and pecuniary concern in the character of the legislation of the country; the value of their property, the nature of their operations, the extent of their profits, all depend upon the laws which are passed relating to internal taxation, the tariff, and the currency. They may suppose that by their own prudence they can protect themselves personally, no matter how widely the course of legislation may be at variance with the general welfare; but in this they will find themselves mistaken sooner or later, for they cannot permanently escape from the effect of embarrassments and disabilities, involving both the class of which they are members and the country of which they are citizens.

There are other reasons however, why many of our best merchants would at the present time refuse to allow their names to be used as candidates for Congress. They would not feel at their ease in an assembly composed mainly of professional men, or of politicians. To obtain their consent, it would be necessary to assure them that they would not stand alone, that they would not be in a hopeless minority, and that the subjects especially represented by them would not be treated as of secondary importance. Above all, they would have to be relieved from the annoyances connected with the distribution of patronage, and from the drudgery of party work. Even professed politicians begin to find this a burden too heavy to be borne; and merchants, of the character indispensable to such a representation as we now plead for, will never willingly assume it. If some comprehensive measure of civil service reform

shall be enacted, the most serious impediment will be removed to our obtaining the consent of just such men as the country now needs, to serve not as party leaders but as legislators and practical statesmen.

A third inquiry awaits our reply: How can we guard against the use of their position in Congress by business men, to promote their personal gain? This question might as well be proposed whenever a man is to be chosen to take the presidency of a bank, or to be placed at the head of a railway or manufacturing corporation. There is always danger in connection with every important appointment; and how is it avoided? By electing to these offices men of probity, standing, and long-tried character, who value their good name and their high standing on 'Change as worth more than bags of gold. There are hundreds of such men in the United States, administering large trusts honestly and well; and having proved faithful in that which is less, they would not probably be false in that which is greater. Moreover it is usually considered a pledge and guarantee of good administration, when the head of a corporation is pecuniarily interested in its success; and everything else being equal, the soundest and safest legislation on commercial and financial questions, might be expected from those who themselves have the most at stake in the prosperity of the country. It is true that a man sometimes enriches himself at the expense of a company in which he is a large stockholder, and a legislator may make a corrupt use of his place for the benefit of himself or of his associates; but cases like these must be left to be dealt with as they arise. We do not know that a respectable merchant would be more likely to yield to this kind of temptation than a lawyer or a politician; but whenever a commercial member of Congress shall be found to devote himself to his own interests, or too exclusively to the interests of the district where he lives, or the branch of business to which he belongs, forgetting that while sent to Congress to represent his own constituency, he is sent there to legislate for the whole people, the public sentiment of the country will not tolerate him for any length of time, and a moral pressure will be brought to bear which will compel the electors of his locality to choose a purer and a better man.

Believing, in the words of Miss Martineau, already quoted, that the shortest way to reform and to all good government is to make the representation as true as possible, we have endeavored in the foregoing pages to show that an essential change is called for in the composition of our national legislature, and to suggest how this

change may be brought to pass. Our object has been not so much to secure justice for a class, the claims of which have been too long neglected, although such a purpose would call for no apology; nor exclusively to advance the material wealth of the nation by appropriate legislation, although the desirableness of this it would be difficult to over-estimate. But such a body of business men as we desire to see upon the floor of Congress would do more than shape financial and commercial legislation; they would prove themselves competent to deal with the various social and political questions which would come before them, and especially they would give powerful support to every wise measure of reform. They would closely scrutinize the expenses of the Government; and they would be unsparing in their treatment of all abuses. They would be as unwilling to accept perquisites as to wield patronage; they would therefore speedily abolish the franking privilege, and they would seek to redeem the civil service from the contaminating contact of party politics. Under their influence also, it might be anticipated that a change for the better would be introduced into the method of conducting congressional business. They would legislate not altogether on theory, but in view of the pressing necessities of the time; they would frame fewer laws perhaps, but this might be no calamity, seeing that often it is the duty of the legislator not so much to make laws as to bring to light those which inhere in the nature of things. Fewer long speeches would be made than at present, and fewer still would be printed; but more work would be done, and in a shorter time. In a word, these men would insist upon an honest, economical, intelligent, and faithful administration of the Government in all its branches; and they would infuse into all, somewhat of the vitality and efficiency which characterize their own warehouses and counting-rooms.

We have confined our remarks to legislation, and have refrained from saying anything in reference to the influence which our business men should exert in the direct administration of the Government. This latter logically comes after the former, for laws must be first made and then executed; but this is a distinct subject and should be separately treated. It may be said however, that when the commercial class shall exercise its proper influence in Congress, it will soon begin to participate in the management of governmental affairs. It was after Richard Cobden had won his spurs in many a hotly contested debate in the House of Commons, that he was offered a baronetcy and a seat in the Privy Council. At the time referred to, we shall have a Department of Commerce

presided over by a cabinet minister, who will be a merchant; and it will be the rule to select the Secretary of the Treasury and perhaps other heads of departments from among prominent members of the commercial class.

In the United States we are favored with a good government; but we cannot safely rest contented with the excellence of the fundamental law on which it is based. We should be satisfied with nothing less than a good government, well conducted. There is no occasion for our adopting the fallacy of Pope's couplet,

> "For forms of Government let fools contest;
> Whate'er is best administered is best."

Having a form which is theoretically sound we should seek for the best administration possible under it, for the wisest application of the principles to which we are attached, and for the equitable and universal enforcement of statutes which shall doubly commend themselves to every citizen, because they are in harmony with his own enlightened convictions, as well as with the spirit of the Federal Constitution. To this end, the intelligence, the industry, and the property of the country should have fair and full representation in both branches — the legislative and the executive — of the National Government.

HOUSES IN THE COUNTRY FOR WORKING MEN AND WORKING WOMEN.

Read at the General Meeting in Philadelphia, October 25, 1870, by George B. Emerson.

Every house intended to be occupied as a dwelling by man or woman, should, in situation, aspect, plan, arrangement, finish, and surroundings, be fitted for the health and comfort, bodily, mental, and moral, of its occupants. Every house to be occupied by working people, should be built at as low a cost as is consistent with thoroughness and durability, and so planned as to save labor and expense as far as possible.

The situation should always be on high ground, with a gradual declivity, when possible, toward the southwest. It should never be on low, swampy, wet ground. The roads should run northwest and southeast, or northeast and southwest, — never north and south, or east and west, for the house will conform to the road or street on which it stands. If it looks south or west, or north or east, the windows on the north side will receive no sunshine between the autumnal and the vernal equinoxes, and very little any day in the year. And every room to be occupied night and day by a human being, ought to have the sun shine into it every sunshiny day in the year.

This is of far greater importance than is usually thought; for the sun is not only the giver of heat and light, but the giver of health and cheerfulness; and no person can enjoy perfect health and good spirits who does not enjoy the influence of the direct rays of the sun every day.

A house should be perfectly dry. This it cannot be if water is allowed to stand under it or near it, on the surface of the earth or beneath. To prevent this evil every house should be drained by drains beneath the surface, down a declivity which will make these drains always take care of themselves.

Whenever it is practicable, a house should be so situated as to command agreeable prospects. There is no person who is indifferent to them; no person who is not made happier and healthier

by them. If the house is in a low situation, something may be done to improve its out-look by making a terrace five or six feet wide, and three or four feet high, on three sides of the house, from the earth thrown out from beneath the house. This might have a graveled or boarded path in the middle, on each side of which might be left a border for climbing plants or flowers and low shrubs. There should always be, for comfort as well as beauty, a veranda, or piazza, or porch, so arranged as to allow the family to sit in the open air in summer, protected from the sun, but open to the breeze, and to sit in the sun, in winter, protected from the wind.

On two or three sides, there should be open land sufficient for a garden, wherein may be cultivated flowers, herbs, and wholesome and useful fruits and vegetables. Time can always be found for the care of flowers; and, in a family of children, habits of industry may be formed by the cultivation of strawberries, currants, and other fruits, lettuce, beans and pease, and melons, beets, onions, and the other useful kitchen vegetables, a few hills of corn and a patch of potatoes. Fruit-trees would be desirable, if they did not soon destroy the garden by turning it into an orchard. But, on the external borders of the garden, a few pear, or peach, or plum-trees may be planted, outside a walk, without taking much from the space for vegetables and flowers. Where a plenty of land can be had, space should be left for the growth of a few pear-trees and apple-trees. Ornamental trees should line the road. Among these, elm-trees, though as beautiful and as easily managed as any other trees, should not be allowed, nor should poplars of any kind. Their roots, running along just beneath the surface, will soon destroy a garden or corn-field, by appropriating all the nourishment. The best and most beautiful native trees for the purpose are oaks, hickories, maples, and birches.

A cellar is necessary in a small house only when it is for a person who cultivates vegetables somewhat extensively. Two or three closets will take the place of a cellar, and be much less costly and more convenient.

In preparing the ground for the site of a house, the soil should be entirely removed from the space to be occupied by house and terrace, and added to the soil of the garden, borders, flower-beds, and terrace.

The floor of the kitchen story should be five or six feet above the ground; high enough to admit of back-plastering beneath every part; or a double layer of thick paper may be laid between the floors. Every outer wall, including the roof, should also be carefully

back-plastered. There are no other means, at least in New England, of adding, at the same cost, so much to the comfort of a house, by excluding cold in winter and heat in summer. Where several tenements are to be under the same roof, the partition walls should be back-plastered on both sides. This will effectually prevent the inmates of each tenement from being incommoded by noise from the other tenements.

To keep the cellar or space under the house perfectly dry, a drain should be dug, outside the house and terrace, running parallel to the side of the house, one or two feet below the bottom of the cellar, if there be one; and the surface of the ground should slope considerably from the house to the line over the drain, or a little beyond. Water should never be allowed, for an hour, to be stagnant beneath any part of a house.

The chimney should be as near the centre of the house as possible. The middle flue should be the flue from the kitchen. On every side of this should be flues, one opening from near the floor in each room. As there is every day a fire in the kitchen, its flue will be always warm, and flues in contact with this, separated by only the thickness of a brick, will be warm enough to act as perpetual ventilators. In the chimney tops there should always be reference to beauty, which may be secured by the mere arrangement of the materials of which they are constructed.

There should always be a cistern amply large enough to contain all the water that falls upon the roof, and gutters and spouts sufficiently large to collect and convey it all.

All the waste of the house should be saved to enrich the soil of the cultivated grounds. It is calculated in England, that the waste of a single family of five persons is sufficient to manure an acre of land. The water from the sinks should not be allowed to run into the drain, but should be secured from waste. If clean, it may be used to water the cultivated plants in the growing season. If not clean, it should contribute to the fertility of the soil. It may be saved by having a shallow trench expressly for it, where it must be immediately covered with loam, a heap of which should be kept for that purpose. It should never be allowed to stagnate, as it then becomes not only very offensive, but dangerous. Fevers are generated by dirty, stagnant water near a house.

Arrangements should always be made, where it is possible — and it is always possible in the country, — to bring up children in habits of industry; and, for this purpose, nothing is so valuable as a portion of land to be cultivated. Every child, properly managed, takes

naturally to the cultivation of the soil, and is pleased with the prospect of some little harvest of his own which may be of use to the family. This is the natural process for the formation of habits of careful and useful industry. If these habits are not formed in childhood, it will be difficult to form them afterwards. Nearly all the work of the garden is easy, and thus adapted to the muscles of childhood. As the boy grows stronger, the harder work, such as spading, hoeing, digging, may be done by him, and with as much pleasure and satisfaction as the sowing, weeding, and pea-gathering, in earlier years.

This is of vastly more importance than is usually thought. A boy accustomed to the easy work of a garden or a field, during the season when the earth can be cultivated, will find no hardship in the harder and more wearying labors of mature years. And there is no test of manhood so real as that of being willing and glad to go to work with the hands at any age. This is one of the precious advantages of living in the country.

In the case of a boy in the city, even if his parents intend to have him brought up to a trade, it is almost impossible for them to accustom him to early industry. He is obliged, at the most important age, to attend school all the year, or to waste his time in the streets. If he is not set to work till he is fifteen or sixteen years old, he finds every kind of work hard. His muscles have not been used at the right age. The new hard work is repulsive; he tries to avoid it. He looks about for something to do that does not require much bodily exertion. He becomes an errand boy, or a waiter, or a runner in a shop.

One of the most prolific sources of criminality is the want of early habits of industry. Idleness is always dangerous, sometimes fatal. The Warden of the State Prison thinks that most of the prisoners would have been saved from this prison, if they had learned a trade. The child should be occupied with something which interests him.

A residence in the country is very desirable for many other reasons.

It is almost impossible for a child brought up in the midst of dirt and noise to become a lover of the good and beautiful in character, or action, or taste. It is almost impossible for a child, made familiar from his birth, with sights of indecency and sounds of wrath and falsehood and blasphemy, to become modest, delicate, true, and reverential. And modesty, gentleness, truth, respect for man and reverence for God, are the only sure foundations for a noble, manly character.

The aim of our institutions, founded on universal education, should be, first, to instruct and train every individual man in some useful, manual art, such as agriculture, gardening, seamanship, house-building, in wood, brick, or stone, furniture making, or tool-making, pottery, or some calling essential to the good of men, and fitted to develop and strengthen the body, and then to add whatever other attainments are necessary to make him a good citizen and a happy man. The most vitally important are those which will render him capable of labor, and thus secure of independence. Education is incomplete which does not form, in the individual, both habits of manual labor, and habits of inquiry and thought, — of work and of reading.

Economy is most important for all children to learn: it will not be easier to maintain a family hereafter than it is now. Labor saving machinery will increase; the occasions for manual labor will decrease. The man depending on his own labor must learn to live less like a savage and more like a civilized being, to accustom himself to food into which less of meat and more of vegetable enter. This he will easily and naturally do, if he has a garden of his own.

For a man intending to form his children to true economy and early habits of useful labor, the garden should be large enough to raise all the vegetables required for the family throughout the year. In that case, a small cellar will be necessary. And inasmuch as fruit, — apples, pears, peaches, strawberries, — are of great value when eaten ripe, as articles of food for the body, and roses, pinks, honeysuckles, and other flowers, are of great use for delight, and as food for the fancies, taste, and the enjoyment of life, provision should always be made for their cultivation on the borders near the house.

The prospect of possessing one's own house, and that a pleasant one, with a garden and trees, and room for the children to play, in safety, must be a strong motive with any man to regularity, good conduct, and economy. To be able to occupy it, at a low rent, and with a certainty of possession in the end, is better than a Savings' Bank.

The most pressing want at the present time, among working men and women in the cities and large towns, is the want of comfortable and healthful habitations. This is true of the Old World as well as the New, and this want has been, there as here, becoming more and more distressing and dangerous every year for many years. In nearly all the large cities, there are great numbers of poor families and single persons who are suffering from this

cause. They are of all conditions, from the excessively poor, the shiftless, the worn out, and the discouraged, up to those who have no home, but are living a single, because they cannot afford to live a better life: — laborers, working by the day; mechanics of all the different trades, handicraftsmen, artisans, poor artists, traders, clerks, male and female, in all kinds of offices, shops, and mills, — all are in want of a healthy home.

Very many of the dens now occupied as homes are destitute of all the essentials of healthy life. Sunshine is essential. Into many of the houses of the poor in Boston, the sun never shines. Pure, wholesome air is essential. The neighborhood of very many of the houses, and the houses themselves, are so foul from the accumulations of every kind of filth, that merely breathing the air for a few moments is sickening. Cleanliness in the habitation is essential. The streets and lanes, and alleys and courts, on which the houses of the poor are crowded, are so filthy, from the absence of the scavenger, and the absence or the filling up of the drains, that cleanliness within the house and personal cleanliness are almost impossible.

Quiet is essential. Every woman, in order to maintain health, physical and moral, ought to have some hours, every day, of perfect quietness and rest. But, from the crowding of several families into one room, from the diverse populations huddled together, with all kinds of hours, or with no hours of rest, — quiet rest by night or by day, is, in many places, impossible.

Innocent occupations, wholesome work and wholesome play, are essential for the happiness of the children, and therefore of the parents. There are now no places but the dirty streets for them to play in; there is no work for them to do.

Temperance is essential. In most of the regions occupied by the poor, the immediate neighborhood of the whiskey shop makes temperance almost impossible to the poor, weary man, poisoned by dirt and foul air and stench and confusion and noise. To the health of the soul, — and these poor people have souls, — a quiet Sabbath, with good reading and serious thought and meditation and worship, is essential. In these dreary abodes Sunday is the noisiest, dirtiest, most drunken, and most quarrelsome day in the week.

The most sacred place for man and for woman, and especially for children, is home. For there, more than anywhere else, are formed the character of the future men and women, and the habits on which the happiness and success of every life must de-

pend; habits of truthfulness, industry, order, frugality, reverence, purity, and self-control; and with these habits, the love of goodness and beauty, to which every child may be educated.

The object of every parent should be to educate his child, not, as is now so common, to aim at wealth and distinction, which very few can ever reach; but at what is far better and happier, to live a good, noble, contented, useful life. To this end the child must have health and a perfect possession of his bodily powers, early activity, and cheerful habits of exertion. "Training, or the formation of habits, rather than teaching or the imparting of knowledge, is the great business of education;" [1] and the most important habits are habits of industry and virtuous living. Every child should therefore be early trained to industry, and, that it may be cheerful, he should be encouraged to play, in every innocent way, during the hours not occupied by work; and special arrangements should be made, when possible, for him to play safely and in good company.

When large numbers of houses are built by associated persons, provision may easily be made and ought to be made, for a common playground for the children. An open space may be left in the rear of all the houses, or in the middle of a square, surrounded by houses, to be enjoyed by all the children.

This may have a few trees — oaks, beeches, tulip-trees, birches, or pines and rose-trees, weigelias, honeysuckles, and other flowering shrubs, for shade and beauty, and in one corner or more, beneath the trees, seats for men and women.

For industry to be, through life, always pleasant, the child should be early trained to habits of work of some kind or other, every day. Reading or study may be made sometimes to take, for the working boy, the place of play, to be considered one form of play. It is a most serious mistake made in the arrangements of schools for those who are to be the working classes, to have their schools held through the year. The winter half of the year is enough for all boys who are destined to labor; perhaps for all others. If the summer half of the year can be devoted, from the age of eight, to the work of the garden, the farm, or the shop, the boy will overtake, in the winter half, those who have been kept at study through the year. This has been many times proved.

If this arrangement is not practicable, the boy may be kept at work half the day, and sent to school the other half. This has been done in many places in England, with signal success.

"The alternation of work and study," says the Earl of Shaftes-

[1] N. W. Senior. National Association, 1863, p. 4.

bury,[1] after having carefully examined the point, "in due succession and relief, the half system, as it has been called, is alike healthy and fruitful. The mind is not depressed by the labor, but the labor is invigorated by the refreshment of the mind."

This is really a universal truth. The organs of the body, throughout childhood, ought to be exercised and strengthened quite as much as the powers of the mind, and at least as many hours, every day of the year, all through the years of adolescence. Men early accustomed to physical exertion are found most capable of severe and long continued study, and educated men have been found most capable of endurance under physical hardships.

In every part of New England there are many young people who mean to live, not by bodily exertion, but by their wits; by what they consider their education. This is very well when they have a really good education and remarkable abilities. But that is true of very few; and the number of those who aspire to live a clerkly life is vastly larger than the number of places that will be ready for them. If they cannot find places in New England, they intend to go westward. But they ought to know that in all the towns in the Western States, schools are already established, or will soon be established, in which youth will be educated numerous enough and able to fill all the clerkships there. If so many young men insist upon growing up without habits of industry, they must take the disastrous consequences; they will be obliged to starve, or to resort, as some of them already do, to house-breaking, shop-lifting, theft, and robbery.

For those who have offended against the laws, and are sentenced to prison, we in Massachusetts do everything in the way of habitation that can be done. We build palaces of stone or brick for them to dwell in; palaces so expensive that the cost of rent for the prisoners is greater than it would be if they were lodged in the dearest hotels. Everything in these princely habitations is, as it should be, clean, bright, healthy, well ordered, and beautiful, and the food and lodging are better than their honest friends outside often enjoy.

But to prevent offences against the laws, to secure homes in which reverence for the laws of man and of God shall be taught, and where habits of industry, cleanliness, obedience, purity, truthfulness, temperance, order, punctuality, neatness, self-respect, thoroughness, thrift, faithfulness, loving-kindness, and the feeling of the sacredness of duty, and the love of God shall be formed, —

[1] Address at Manchester. *Social Science Transactions*, p. 5.

the best possible preparation for life, — we do nothing. The houses in which the very poor are compelled to dwell in our cities seem as if expressly intended to form habits of indolence, disobedience, falsehood, excess, profanity, disorder, disregard of property, drunkenness, and the violation of every law, human and divine.

The proverb says — everybody repeats — "*Prevention is better than cure.*" Why should we not act upon this conclusion of the wisdom of antiquity, confirmed, as it is, by all the experience of time? Why should it not be the business of the government of a State or a city to avert evil? Why should not all good citizens unite, cheaply to prevent what they will be dearly taxed to attempt ineffectually to cure?

The habitations of the poor, in most large cities and towns, look as if they were intended to train and educate children for crime and the prison. We punish and then pamper the offender; we do little to prevent the offence. Good and virtuous habits, the only effectual prevention, cannot easily be formed in children surrounded by lying, profane, filthy, disorderly, lewd, violent, lazy, intemperate, wasteful men and women.

The want of good cheap tenements is tending to degrade the race. Many persons of the best character, of both sexes, who would marry, if good houses, pleasantly situated, could be had at a reasonable rate, are now prevented from marrying by the want of them; while poor wretches, without thought or foresight, are not deterred. They marry, and are obliged to live in foul, unwholesome tenements, where it is next to impossible to rear children to decency and virtue. The prudent and thoughtful, who would be likely to bring up children well, cannot marry, and deplorable often are the consequences.

It seems almost impossible, even under the most careful management, that habits of industry should be formed in the children of the indigent in a city. There is nothing for the poor things to do. There is no place but the streets and dirty courts for them to play in. Habits of lying, truancy, quarreling, profanity, pilfering, must often be the necessary consequence to the children of the want of a pleasant home. The physical consequences to the women of the crowded, foul, and unhealthy homes to which they are condemned, are headaches, rheumatisms, fevers, and, at last, unmitigated wretchedness and despair.

The houses of the agricultural population in New England are, and always have been, convenient, homelike, and comfortable. The houses of the mechanics have naturally become like them.

The habitations of the laboring people in foreign countries are, almost universally, wretched huts and hovels, often without floor or glass windows, or comfortable seats or bed. Their descendants in our cities feel the evils of poor tenements all the less, as they are often an improvement in many respects, upon those in which they were born.

The work of providing proper habitations for working men and women is of as great importance to the nation as to the race. One cause, doubtless, of the constant increase of poverty in all the large cities of this country, of Britain, and the other European countries, is the wretchedness of the habitations of the poor. Any person long confined to a dirty, ill-ventilated, shabby, and scanty house, loses courage, and at last hope. The hardships and filthiness act necessarily upon his health, his strength, and his spirits. The huddling of children of both sexes in the same room or in rooms incompletely separated, and the absence of cleanliness and decency in the out-houses, gradually dull, and at last destroy all natural modesty and delicacy, and prepare for the lowest vice. The wife, naturally modest and gentle, confined year after year to close, crowded, unwholesome rooms and surrounded by noisy, dirty, and indecent neighbors, loses at last, with her health, her gentleness, her modesty, and her patience, and becomes discontented and heart-broken.

The husband, finding no place for comfortable and quiet rest, after the labors of the day, no place for reading or thought, no place to enjoy the company of his children and the comforts of home, loses his self-respect, and almost of necessity resorts to the beer or whiskey shop, and thus enters upon the road to ruin.

The working classes, as they are really the support, ought to be and might be the hope of the land. The class of the respectable and successful men of business in all departments and in all the professions, has been hitherto recruited chiefly from the families of the farmers throughout New England. But work upon the farm having become distasteful and unfashionable, the value of these recruits has deteriorated. For success in any of the professions, and in every line of business, early habits of industry are of the greatest value. It is very difficult for any one to form the habits of laborious diligence in study essential to true professional success, who has not formed in childhood habits of diligent industry on the farm, in the workshop, or in the parlor of his parents. Habits of careful reading, early formed, are the only tolerable substitute for habits of manual industry, and for robust health an insufficient

one. In the poor habitations now occupied by many persons longing for better, habits of diligence in reading good books cannot be formed for want of a quiet place to read in. Habitations for working men and women, from among whose sons must come chiefly the men reliable for health, energy, virtue, and industry, should therefore be in the country, some miles distant from town, where temptations to the tavern, the theatre, and the gambling-house, and the mania for extravagant dress, shall be felt only so far as to be controllable by sensible, virtuous, and religious parents.

The expense of decent habitations, where they are to be found, in town, is now enormous. Even the miserable habitations which many are obliged to occupy, are twice as expensive as good healthy ones ought to be, and as they might be, if proper action were taken to secure them.

There are many mechanics who have been respectable, and would be so again if they had houses that would permit them to be, but who are now sinking gradually into despair from the expense of living and the extravagance of their wives and daughters, who would be inspired with new hope if they could be offered habitations in pleasant, respectable, healthy situations, so near their business that they could easily reach them, and at such cost that they could hope, in a reasonable time, by industry and frugality, to become possessors of them.

To every man a home is more precious which is his own, which he can leave to his wife and children. Every man emerging from poverty, becomes more of a man, and a more reliable citizen, when he comes to possess free from debt the pleasant house he lives in. The possession of real estate gives a man an interest in his country. In the quiet of his own house he may become a reader and a thinker, firm on the side of right and law, capable of noble and disinterested conduct.

Many a man is now obliged to occupy at an extravagant rent, a miserable tenement in an unwholesome situation, where there is no room for his children to play except in a filthy street. He is surrounded often by families of a different race, dirty, intemperate, vicious, noisy, false, and dishonest. He needs to live in a neighborhood of persons of feelings and habits like his own, or what he would rejoice to make his own. His children ought to be able to play in the sunshine or under the shade of trees, on the clean grass by the side of a country road, or on a common, safe from vicious, unwelcome intruders. How would he be encouraged and rejoiced by the offer of a house and lot having all these advantages, which he would be able, within a few years, to make his own.

Many a man now in danger of habitual intemperance, might be rescued by being provided with a good, well situated house; and a man saved from intemperance or improvidence becomes not only a better and more happy man, but a more industrious and useful one. He forms habits of self-command and of thoughtful attention, which make his work in any department more valuable at the same time that it is increased in amount.

A large supply of better and cheaper houses ought to be had, and must be had, if the working men and women are to become what they ought to be and might be. Without aid from others, these better houses cannot be built by those who need them. They have neither time nor means to attend to the building of them, to select, purchase, lay out, and prepare the necessary land; nor to buy the material at wholesale, nor to see to the best planning and the best and most economical building of the houses, though many of them are the persons most fit to be employed in building them.

All of these men are not poor; for many of them are successfully engaged in their business, and receiving good pay. But, by reason of the very evils we are deploring, few of them have been able to lay up money. Those who have laid up any have commonly deposited it in a Savings Bank, where it is entirely beyond their control. Many of them are discouraged; many, as we may easily conceive, almost in despair. Their earnest energies from day to day, are only sufficient, often not sufficient, to keep them from debt and the danger of poverty. Some of them are living at dear rates in poor boarding-houses, kept by women themselves struggling for existence, all pressed down by the enormous cost of rent, and of fuel, food, and other necessaries purchased daily at retail. Some of them are living in rooms or small tenements at excessive rents, in old ruinous houses on unwholesome, filthy, dark, crowded alleys and courts, their spirits crushed by the absence of sunshine and wholesome air, by shocking sights, nauseous smells, chaotic noises, excessive heat in summer and cold in winter, often in the neighborhood of the irresistible temptations of the liquor shops. These families have claims upon the prosperous which it is unchristian, almost inhuman, to disregard.

Many without doubt are in comfortable houses, as good as they desire, in pleasant situations, and respectable neighborhoods, but hired, often, at such rates as to leave nothing on hand when the expenses of the year are paid. These cannot buy land and build for themselves. For of the vast numbers of working men, those

only who are so successful as to lay up pretty large sums, are provided with habitations of their own. The industrious poor man, who has a large family, and thus finds it impossible to lay up, and the confident young man who has in hopefulness married a wife, and finds from his residence in a city or large town, and from the prevailing extravagance in dress among women, that his expenses constantly keep up with his income, have no means to provide themselves with cheap houses. For such as these provision ought to be made, which they cannot make themselves.

The hardships coming from the excessive cost of house rent and board press upon another class of persons with still more severity; and these persons are even more incapable of overcoming or of standing up against them. Multitudes of single women and widows, oftentimes persons of some education and refinement, supporting themselves by their needle, or by service in shops, offices, and factories, are crowded into ruinous rooms, in old houses or unfinished attics never designed to be occupied, in which life is hardly worth living.

These persons cannot do anything towards obtaining better lodgings. There are none to be had. The stoutest and bravest bear up in this struggle against fate. The weakest and tenderest are driven by despair into the streets, and are sometimes compelled to find homes in the dens of infamy.[1]

The consequences of the degraded life of these people, to themselves and to their children, are not theirs alone. Society suffers with them. If they are degraded by the lives they are obliged to live, all who descend from them, all who associate with them, all who employ them, and all who will have to support them, must share the evil. From the well-conditioned working men and women, with constitutions strengthened by reasonably hard labor, and from the patient, industrious, and frugal habits of the children brought up and educated as they ought to be, recruits for all grades, conditions, and employments, for the refreshment and re-invigoration of all ranks, ought to come men and women with better constitutions, better habits, and higher aspirations; to furnish not only

[1] Some of these wretched women, of American birth, might have comfortable and respectable homes, with ample wages, if they were not prevented by a new, false pride. There are hundreds of prosperous families in every part of New England who would prefer to have only American girls in their kitchens, and who would treat them with respect, sympathy, and kindness, as friends. But a false idea of independence, forgetfulness of the fact that Jesus himself came into the world "not to be ministered unto but to minister," and a disregard of the truth, that labor is always respectable, and that to help each other is the highest exercise of virtue, drive them from the family into all the extremes of servitude, suffering, and degradation.

better workers, more capable artisans, better fathers and mothers, but also better artists and better scholars; not only better builders of houses, but stronger builders of laws and of States. They must, therefore, have the aid of men of property. Money is wanted to buy and lay out the land, to purchase materials, stone, brick, and lumber, and to build the houses.

When the houses shall have been built, or even while they are building, money may be obtained on mortgage. Some of those who are in want of houses may have laid up money which they will be glad to take from the bank and invest in houses to be their own.

For those who will advance the money, this will be a safe investment. It ought not to be a very good one, financially considered, as a leading object should be to furnish working men with good houses at reasonable rates.

There are many others besides the working men, so called, who would be greatly benefited by an opportunity to get houses in the country, at a moderate distance from town, at reasonable rates. There are many young men in Boston acting as clerks, who would be glad to marry if they could get such houses. They are receiving salaries that would enable them to live very well in comfortable, low priced houses in the country, but which do not enable them to hire a house at the excessive rents of the fashionable parts of the town, nor to board at the enormous prices of the first class hotels.

If twenty-five or fifty or more such persons would unite and agree to live, with their families, in the same immediate neighborhood in the country, they might be sure of charming little snug houses, in pleasant situations, at very moderate rates.

It would be well if a similar number of mechanics or other working Americans, knowing each other, of similar habits, tastes, and wants, coming, for example, from the same part of New England, would agree to hire and occupy houses near each other. The children would then grow up together, and form friendships that would be valuable and dear for life; and if the families were sufficiently numerous, they might have a school district of their own, with a course of study better suited to their future than any now to be found. They might have, at very low prices compared with any houses now to be had, convenient and comfortable houses in healthy and pleasant situations. If a sufficient number would unite, they might command, at a very moderate cost, a playground set apart for their own children to play in, a broad open space, ground surrounded by oaks and other shade trees and shrubbery.

The same might be done by a company of English and Scotch, or by a company of Germans, Swedes, or Norwegians. The same thing might indeed be done by the natives of any country who could be found in sufficiently large numbers to form a little precinct or settlement by themselves; care being taken in every case, that no family of a nationality different in habits and tastes, should be allowed in the same immediate neighborhood. No company of persons of nice, quiet, temperate, and orderly habits, would like to be annoyed by noisy, quarrelsome, or intemperate neighbors.

Where considerable numbers of families of similar character, wants, and feelings, were thus brought together, they might form a union for the purpose of getting their meats, breadstuffs, fuel, and other necessaries at wholesale prices, and thus materially diminish the expense of living at the same time that they secured excellence in the quality of their supplies. Next to the necessary expense of rent and food in a well ordered family, is the expense of fuel. This is almost everywhere excessive. Most of our houses are heated by furnaces in the cellar, and much of the heat, probably one third, is wasted by heating the cellar and by going into the cellar walls. Another portion is often wasted by being allowed to pass directly off with the smoke.

The remedy for the first of these evils is having the furnace built somewhere above the kitchen floor, so as to leave the cellar cool enough for vegetables and fruits.

The other may be remedied by the use of a very simple apparatus, contrived by a gentleman of Boston, which does most of the cooking by means of steam.

If a company of generous and disinterested capitalists would unite for the express purpose of providing houses for their fellow-men, they might supply such associations with the very kind of houses they wanted, in desirable and easily accessible situations. They might secure large tracts of land at reasonable prices, make arrangements with railroads advantageous to all parties, and employ the most suitable persons to carry out their plans. And, for so noble an end as that of securing the success, independence, virtue, and happiness of their fellow-men, why should not men of property associate, and be willing to run some risk? Would not the thought that the men, women, and children of a hundred families were more prosperous, happier, and better for their exertions, be a more permanent and more heartfelt satisfaction than any that could come from a slight addition to their own property? Is not

the remembrance of a disinterested deed a pleasant companion for old age? Were not the meditations of George Peabody, as he thought of the houses he had built for the poor, and the instruction he had provided for the ignorant, more soothing to the dying man than would have been the thought that he had built palaces for himself, and felt that he must soon leave them to strangers?

MINORITY REPRESENTATION IN EUROPE.

BY THOMAS HARE, LONDON.

READ AT THE GENERAL MEETING IN PHILADELPHIA, OCT. 25, 1870.

THE method of electing representative bodies which shall most effectually bring to the work all the thought, intelligence, judgment, and patriotism of the nation, is a subject of paramount importance to a self-governing people. It has been often before the Association for promoting Social Science in England. The object of the amendment of the representative system which is proposed, and which has been presented in various forms of greater or less efficiency, is, to accomplish for the peoples who live under democratic, republican, or parliamentary institutions very much the same result as the establishment of those institutions effected as against the despotic, monarchical, or aristocratic governments which preceded them. It is to bring home to every individual of the community the power of judgment and of choice which the election by majorities alone almost of necessity places in the hands of a few who form the caucus or political leaders of the district. It is to establish what the Chicago Times has lately well called "the free vote."

The evils of the existing system are described in an article in Putnam's Magazine, for June, 1870. It produces "not only a misrepresentation of parties with its tremendous consequences, but (speaking of New York) a representation of private interests struggling for private legislation, and converting our legislative halls into scenes of jobbery and intrigue. Under the false pretences of party, the elector is cheated or seduced into voting for one of two men, neither of whom he likes or would trust in the management of his private affairs. He is reduced to a choice of evils, and he makes it under the pressure of party discipline." The system may not always be productive of evils of so gross a kind as are here depicted; but when success is made to depend on combinations, which are directed by a few persons forming a committee, or by whatever name they be called, there is every temptation to resort to corrupt bargains and contrivances, for which a boundless field is open.

I have elsewhere treated of the historical causes to which elec-

toral majorities owe their power, and the efforts which had been up to that time made in many countries, beginning in 1855 in Denmark, to arrive at a method consistent with individual freedom and discretion. In no country have these efforts been more persistent and successful in gaining public attention than in Switzerland. MM. Ernest Nanke, Amédée Roget, and a body of able coadjutors, established a weekly journal, Le Réformatiste, now consolidated with L'Indépendence Presse, for the advocacy of proportional representation. Both in the canton of Geneva and of Neufchatel committees of the Grand Council were appointed to consider the question, and in the former canton the committee recommended the adoption of the system in a form almost identical with that which I had proposed, and this conclusion of the committee, though not accepted ultimately, was yet supported in the Grand Council by two fifths of the assembly, evidencing in a remarkable way the progress of thought on a subject affecting so many habits, prejudices, and interests, or supposed interests, and altering so materially the basis of political power.

Of the other methods of obtaining a more accurate representation nearly all have been collected and their respective merits examined in a recent number of the Révue des Deux Mondes. It will be sufficient to mention those, the object of which is to prevent any considerable minority of voters from being anywhere deprived of a voice in the representative council. They are: 1. The election by lists, or the *liste libre*, as it is called, by the Association Reformiste of Geneva. 2. The limited vote, which has been adopted in the English Parliament in the case of a few constituencies having three members, by restricting the vote of each elector to two. 3. The cumulative vote, proposed in Congress by Mr. Buckalew, in the Illinois State Convention by Mr. Medill, and adopted at a recent election of Town Councillors in Bloomsburg, Pennsylvania. 4. Preferential voting and election by quotients of the aggregate electoral body. This is the method, the details of which I have explained in the treatise to which reference has been already made, and which has been also brought before the public in various publications. The first of these four methods is recommended by the principal leaders of the reform movement at Geneva. It proposes that every party shall agree upon a list of members to be nominated, and that each party shall elect so many members as shall be proportioned to the number of its voters, taking them successively from the head of each list. The second method, that called the limited vote, was the subject of discussion

in the House of Commons on the 15th of June of this year, on the bill brought in by Mr. Hardcastle to repeal so much of the last reform act as restricted the voters in Manchester, Birmingham, and other towns having three members, from voting for more than two. After a discussion of several hours, in which the Prime Minister, Mr. Gladstone, took the side of the adversaries of this method of representing minorities, the bill was reported, and the limited vote retained by a majority of one hundred and eighty-three against a minority of seventy-five who agreed with the minister, and with the purposes of the bill. The British Parliament thus determined to retain a system which does something like political justice in a few partial instances, but which by the same process offends many who, like Mr. Bright and others, conceive it to be more important that the result of the sentiments of the majority of a great constituency should be expressed, than that regard should be paid to individual thought. Mr. Fawcett, an advocate for proportional representation, and therefore opposed to Mr. Hardcastle's bill, stated nevertheless, that he thought the form of minority representation adopted by the act the worst that could have been chosen. One of its chief infirmities arises from its not being accompanied by a distribution of seats, which would give the majorities in the great towns it affects their due weight in the legislature. It enfeebles them to the same extent in which it acts fairly toward the minorities.

The third method — the cumulative vote — is the method selected by the committee of the Senate last year, and elaborately discussed and explained in the report of that committee. It is expressed in the bill by a single clause, therein proposed for the amendment of the Constitution of the United States: —

"That in elections for the choice of Representatives to Congress, whenever more than one Representative is to be chosen from a State, each elector of such State shall be entitled to a number of votes equal to the number of Representatives to be chosen, and may give all such votes to one candidate, or may distribute them equally or unequally among a greater number of candidates."

The fourth and last method, the election by quotients and by preferential or contingent voting, is thus referred to in the report of the Senate. That system, it says, "may be put aside from the present discussion, because it is comparatively intricate in plan, and cumbrous in detail; *because it assails party organization*, and because some of its most important effects cannot be distinctly foreseen. It is so radical in character, so revolutionary in its prob-

able effects, that prudence will dictate that it should be very deliberately considered, and be subjected to local experiment and trial, before it shall be proposed for adoption upon a grand scale by the Government of the United States."

That so great a change should be very deliberately considered there is no doubt. It has been now several years under discussion by some of the most advanced thinkers, and it has been, moreover, in practice since 1855 in Denmark, and the objections have been really found none other than imaginary. Whether it be intricate or cumbrous may be determined by a simple statement of what its application requires, which is no more than this: that every voter shall place on his voting paper, in the order of his preferences, as 1, 2, etc., the names of the candidates he wishes to elect, the vote being taken for the first, or if the first has a quotient of votes already, then for the second, and so on. The quotient is ascertained by dividing the number of all who vote by the number of members to be elected; thus, if one thousand vote and ten are to be chosen, every hundred voters may elect one member, and if a candidate has two hundred votes the first hundred is appropriated to him, and the other votes of every elector given to the candidate whom that elector has placed next. By this system every vote is made effectual.

The objection to this method which operated most strongly with the committee, is no doubt that expressed in the passage in italics. *It assails party organization.* In the other two systems great scope is still afforded for party management, although the ultimate results are no doubt infinitely more just to all parties than is the present system. By thorough electioneering discipline, a party far less than two thirds of the constituency can elect the three members under the limited vote. Thus, of a constituency of eighty-four, fifty-one may obtain the entire representation by dividing themselves into three sections of seventeen each, and dividing the first to vote for A and B, the second for A and C, and the third for B and C. The remaining thirty-three voters forming the minority, though far exceeding one third, would be outvoted by the thirty-four votes obtained by the three candidates of the majority. Again, by the cumulative vote, an advantage is given to scarcely more than one fourth of a constituency, if held in thorough discipline, by enabling them to secure one third of the representation. Of one hundred and twenty voters, a minority of thirty-one, by accumulating their votes, may elect one out of three members, for they may give him ninety-three votes, whereas the remaining

eighty-nine voters could not give to three candidates ninety votes apiece, and could therefore elect no more than two. It is moreover clear that if too many candidates be put forward by one party, owing to its members exercising a greater amount of discretion or freedom of thought and choice, they may be wholly shut out from representation by their better disciplined adversaries.

The question, in fact, is between a system giving perfect freedom to individual opinion and judgment, and systems which render every one who would vote with any effect more or less a machine in the hands of the party leaders. It is this which makes the more prominent political men in England, as well as in America, shrink from adopting the preferential and quotient method. If that were in existence every voter capable of thinking and acting for himself would feel that he was independent of any party dictation, and was yet able to insure that his vote should not be thrown away, but would be given in behalf of the best candidate, he and others agreeing in any measure with him, could nominate. The staple of the arguments against it, introduced incidentally in the House of Commons on Mr. Hardcastle's bill, was entirely to this effect. The voters would be too free — there are many political and social questions which cannot be agitated now, as there are not enough voters of such views in any one district to form a majority; — these opinions would find a quotient of supporters if you give them the chance and they be represented; therefore, do not give them the chance; do not allow the voters to be free! The same apprehension of the loss of the key of party management, and through that of electoral success, operates with the leading Whigs and Liberals in England. In 1869, Mr. Gladstone's Ministry obtained a committee "to inquire into the present modes of conducting parliamentary and municipal elections, in order to provide further guarantees for their purity, tranquillity, and freedom;" and in April the Representative Reform Association presented their petition to the House, praying that it might be referred to the committee, to receive, consider, and report on the evidence the association would lay before it with these ends. The petition stated that it is essential to true freedom that in the selection of representatives the electors should have a wider range of choice, corresponding in some measure with the varieties of their knowledge, judgment, and opinion; that tranquillity in elections was incompatible with the separation of every electoral community into hostile bodies, making the success of one dependent upon overcoming the other, while it would be secured by enabling each con-

siderable section of public opinion held by a porportionate number of electors to be represented by the best exponents of their sentiments and objects, and that the same extent of choice would call into action all the best motives to effort, and afford the best guarantee against corruption. In reply to my application, founded on the petition to be examined by the committee, I was informed by the chairman, the Marquis of Hartington, that "the object of this inquiry was the mode of conducting elections on the existing constituencies and under the existing conditions." He added that the committee understood that the system which I advocated would totally alter the system of representation, and they, therefore, declined to take it into consideration. It thus appears that no gain in respect to purity, tranquillity, or freedom, must be purchased at the price of interference with the conditions of local success, or by means that endanger the influence of the political magnates, who in one party or the other, hold the reins of parliamentary government.

I will conclude this paper by noticing an experiment of great value, which promises to meet the expressed wish of the Committee of the Senate. The alumni of Harvard College, on the Commencement day, 1869, resolved "that the standing committee shall investigate the system of voting devised by Mr. Thomas Hare, and if in their judgment it promises substantial advantages shall adopt it in the nomination of overseers." The standing committee determined to secure nominations for ten candidates for the Board of Overseers, according to rules founded upon the system, and which they promulgated on the 30th of April, 1870. By these rules every elector was invited to send in the names of any number of candidates, all on one ballot, indicating his preference by placing the figure 1 opposite his first choice, 2 opposite his second choice, and so on. They were informed that each ballot would be counted for the first choice alone, the other names being considered as substitutes to be resorted to, in the order of the preferences indicated, only, in case the person named as the first choice had enough votes (one tenth of the whole number of ballots) to nominate him without it, or in case he had *not* enough votes to entitle him to a nomination. At the time of writing this paper I have not been informed of the result of this ballot.

I venture to quote the last page of my published treatise: "In framing this system I have always looked forward to its reception by the American people with an anxious hope. It may be an ungrateful task to struggle against the *effete* traditions and implacable

prejudices of Europe; but an appeal to the patriotism of a people who shrink from no sacrifice in pursuit of their ideal of national greatness can hardly be in vain. It is to the American Republic that the eyes of the Old World will turn for a spectacle of what self-government can accomplish. Its unexampled progress is the marvel of these modern ages."[1] Surpassing all other people in the arts of peace, as they minister to the universal comfort and well-being, attaining a not less distinguished though unhappy eminence in the art of war, a nobler work remains to them, that, rising like a strong man in his strength, they shake off the parasites that prey on the credulity and folly, and pander to the vices of the public, and become the leaders of mankind in the far greater art of government.

[1] It is important to direct attention to the different effect of proportional and contingent voting on the one hand, and cumulative voting on the other. With cumulative voting a party may lose its just share of the representation through having too many or too few candidates, and this renders it necessary, or at least more advantageous and safe, for them to ascertain their strength by a preliminary canvass the expense and trouble of which will often be serious and onerous. With contingent voting no preliminary canvass is necessary, as the surplus votes which are not required by one candidate of a party will be transferred to another candidate of the same party under the provision which the voter has inserted for that purpose on the voting paper or ballot, until ultimately the party will obtain as many representatives as its numbers entitle it to. The reasons for the greater comparative degree of favor with which the cumulative vote has been received is perhaps most fully stated in the report of the Committee of the American Senate, to which I have referred, — that "it assails party organization." With the cumulative vote every elector who would be certain to act with effect must place himself in the hands of the committee or canvass which directs his party. There are, no doubt, many voters, perhaps the greater number, who prefer this guidance and regard it as more secure and satisfactory, than independent action, and there is nothing in preferential or contingent voting which would prevent the closest adhesion to party resolutions that any voter or body of voters may desire. But preferential or contingent voting forces nobody to submit to party dictation. It leaves every voter of independent thought and will to exercise his discretion in the choice of his representative, and secures his vote from being lost, — making it as certain as preferable that it shall have a distinct weight in the result. With regard to party majorities, it avoids the waste of voting power involved in bringing three thousand votes, for example, to overcome two thousand, when two thousand and one would be enough. Contingent voting economizes this power on both sides. The liberty of individual action, which it concedes to independent thought, is not so much power taken from party. It is a clear, natural gain. Parties would still have free and more steady action. Majorities would save all the force they now waste in collecting votes, often far more than are necessary to victory, and minorities would utilize the loss of votes they now suffer in absolute defeat. Contingent voting, in fact, realizes a faith and trust in the people.

APPLICATION OF MR. HARE'S SYSTEM OF VOTING TO THE NOMINATION OF OVERSEERS OF HARVARD COLLEGE.

By Wm. R. Ware, Secretary of the Standing Committee of Electors.

Boston, *March* 1, 1871.

To the President of the American Social Science Association: —

Dear Sir: — I am glad to supply, in accordance with your request, a detailed statement in regard to the method of counting and sorting votes, under Mr. Hare's system, adopted by the Cambridge Committee last year.

In order to avoid, so far as might be, the awkwardness and errors that were likely to attend a first performance of their duties, and to gain an experience that would furnish rules of procedure to guide them in counting the ballots, the committee subjected the scheme to the test of a preliminary experiment. My own connection with the Institute of Technology afforded the desired opportunity for conducting a mock election, on a scale sufficiently large for the purpose in hand. A ballot was accordingly prepared in the following form, and the students in the School of the Institute, nearly two hundred in number, were invited to express their preferences among certain English authors who were nominated as candidates for election.

Preference.	Please add to this list of authors any other names you may prefer, and then indicate your preference among them all by writing the figure 1 against your first choice, 2 against your second choice, and so on.	
.	1.	Bacon.
.	2.	Shakespeare.
.	3.	Scott.
.	4.	Byron.
.	5.	Burns.
.	6.	Macaulay.
.	7.	Tennyson.
.	8.	Thackeray.
.	9.	
.	10.	
.	11.	

This experiment perfectly answered its purpose, giving the committee an experience which enabled them to count the ballots for Overseers with promptness and precision. As it illustrated, both in the casting and in the counting of the votes, every point of

interest, and as there might be a question of the propriety of making public the details of the *bonâ fide* election which followed, I will take this mock election as my example instead of the real one.

In the casting of the votes three things were noticeable. In the first place although no instructions or explanations whatever were given to the young men beyond those printed at the head of the ballot itself, very few votes had to be rejected on the score of informality. Out of 150 votes, 144 were correctly made out. In the second place, what errors were committed were all of one kind, consisting in the indication of two or three names as the voter's first choice, two or three as second choice, and so on. In the third place, a large number availed themselves of the permission to add to their list names not regularly in nomination, the followers of Mr. Dickens especially rallying handsomely to his support.

All these things happened in just the same way in the voting for Overseers: 374 out of 380 ballots were made out in proper form, 6 exhibiting the phenomena of the double preference; and 50 names not on the printed ballots,[1] were added by the electors. No one of these names, however, obtained any considerable support.

[1] Several forms of ballot were printed during the canvass, and circulated among the alumni by the gentlemen who prepared them. The ballot most extensively used and which was understood to contain most, if not all of the names that had been before the public in this connection, was in the following form: —

THE ELECTOR who may make use of this ballot will please add to this list any names he may prefer, erase such as are not acceptable, and signify his preference among the remainder, in accordance with the following provision: —

"Each elector may nominate any number of candidates, and shall signify his preference among them by writing the figure 1 against the name of his first choice, 2 against that of his second choice, and so on." Bachelors of Arts of five years' standing, and all persons who have received honorary degrees, are entitled to vote at these elections.

I hereby nominate the following persons as candidates for the Board of Overseers of Harvard College, at the election of 1870.

		PREFERENCE.
	HENRY W. PAINE.	.
	JOHN WELLS.	.
	DAVID H. MASON.	.
Class of 1814.	JAMES WALKER.	.
" " 1828.	GEORGE S. HILLARD.	.
	(And twenty-one other names.)	

[Signature of the Elector.] .....

Class of .....

Ballots must be sent, during the month of May, to

"W. R. WARE, Secretary, 2 Pemberton Square, Boston."

The ballots will be counted in the order in which they are received.

From this long list of candidates, ten were to be selected according to the principles of Mr. Hare's scheme, and in the mock election the committee proposed to select four from among the authors.

A few trials developed the following canons: —

RULES FOR SORTING AND COUNTING THE VOTES.

After throwing out irregular and informal ballots and preparing a blank Tally or Register, ruled in columns to receive the record of the election: —

1. Sort the ballots according to the first choice expressed on each, entering the names of candidates who receive more than one vote upon the Tally, with the number of their votes, and entering the votes cast for candidates who stood first on only one ballot, under the head of Scattering.

The sum of these numbers gives of course the whole number of ballots cast.

Ascertain the Quota, or number of votes required for an election, by dividing the whole number of ballots by the number of places to be filled.

2. Set down as *elected* all candidates who have received the quota and upwards; writing down the number of their surplus votes in the next column and noting the election upon the Tally by ruling a double line.

Distribute the surplus ballots among the other candidates, according to the next choice indicated upon each, passing over the names of those already elected, but taking account of all new names.

Enter the number of new votes thus received by each candidate in the same column with the surplus of the candidate elected. This surplus will of course equal the sum of such new votes. Add the new votes to those previously received and carry the amount forward for a new count.

Continue this until it appears that no candidate has votes enough to make up the Quota.

3. Set down as *rejected* the candidate who has fewest votes, noting this rejection by drawing a single line through his place upon the Tally. Distribute his ballots among the remaining candidates according to the next choice indicated upon each, passing over the names of those already elected, and *not* taking account of new names.

Enter the new votes thus received by each candidate in the next column, add them to the number of those previously received, and carry the amount forward for a new count. The sum of the new votes will of course equal the number of ballots redistributed.

In this way the scattering votes are first disposed of, then those of candidates who have only two votes, then of those with only three, and so on until the number of candidates is reduced to the number of places still to be filled.

4. In case of a tie, reject first the candidate whose figure in the first column is the lowest, that is, who is first choice of the fewest voters.

The following table exhibits the application of these rules to the case in hand. It is a copy of the Tally or Register of the votes cast at the Institute of Technology.

TALLY. 144 Votes. Four to be Elected. Quota, 36.	*First Count.* Shakespeare elected.	Shakespeare's surplus redistributed.	*Second Count.* No election.	Twenty-six scattering votes redistributed.	*Third Count.* Scott elected.	Milton's votes redistributed.	*Fourth count.* No election.	Bac-n's and Thackeray's votes redistributed.	*Fifth Count.* No election.	Byron's votes redistributed.	*Sixth Count.* No election.	Macaulay's votes redistributed.	*Seventh Count.* No election.	Dickens' votes redistributed.	*Eighth Count.* Tennyson elected.	Tennyson's surplus redistributed.	*Ninth Count.* Burns elected.
	I.		II.		III.		IV.		V.		VI.		VII.		VIII.		IX.
Bacon . .	4	–	4	–	4	–	4	[4]	–	–	–	–	–	–	–	–	–
Shakespeare	48	[12]	=	=	=	=	=	=	=	=	=	=	=	=	=	=	36
Scott . .	22	5	27	9	36	=	=	=	=	=	=	=	=	=	=	=	36
Byron . .	6	2	8	2	10	–	10	–	10	[10]	–	–	–	–	–	–	–
Burns . .	9	2	11	5	16	–	16	–	16	4	20	2	22	8	30	2	32
Macaulay .	6	–	6	3	9	–	9	2	11	1	12	[12]	–	–	–	–	–
Tennyson	8	–	8	4	12	–	12	5	17	4	21	7	28	10	38	[2]	36
Thackeray	4	–	4	–	4	–	4	[4]	–	–	–	–	–	–	–	–	–
Dickens	11	2	13	–	13	1	14	1	15	1	16	2	18	[18]	–	–	–
Milton . .	–	1	1	1	2	[2]	–	–	–	–	–	–	–	–	–	–	–
Scattering	26	–	26	[26]	–	–	–	–	–	–	–	–	–	–	–	–	–
Lost . .	–	–	–	2	2	1	3	–	3	–	3	1	4	–	4	–	4
	144	12	144	26	144	2	144	8	144	10	144	12	144	18	144	2	144

It will be observed that the alternate columns, showing the successive counts, all add up 144, as they should do, counting the double lines as representing 36. The sum of the figures in the intermediate columns is equal, as it should be, to the number of the votes redistributed. Facility for checking and verifying the accuracy of the work is thus afforded at every stage of the election.

The ballots marked *Lost* are those which proved, on redistribution, not to contain the names of any of the remaining candidates.

It is to be observed that under these rules, the list of candidates is closed after the surplus votes are distributed. Any persons who by that time have failed to secure a single vote as first choice, are

ruled out. The consistency of this rule is clear when it is observed that no new name can now come up except it occurs on the ballots of some candidate who has been rejected, as being at the foot of the poll. But no such new candidate could have more votes than his predecessor, so that to recognize his name would only subject him to instant rejection in turn.

In counting off the Quota in order to redistribute the votes of the elected candidates, the committee followed of course their own rule, and counted the votes in the order they were received. This is a natural and convenient rule though arbitrary in its nature. Its effect upon the result is, however, very slight, the destination of only 14 votes being affected by it in this case, and of only 96 in the case of the ballots for Overseers. Even this number might, of course, if selected under a different rule, materially change the result of the election, and it is true that the necessity of adopting an arbitrary rule in counting off the quotas, introduces an arbitrary and fortuitous element into the scheme. But it is to be observed that although counting off the votes in a different order might elect one candidate rather than another, it would not be the candidate of a different party, but another candidate of the same party. The element of chance, in fact, though seriously affecting the fortunes of the candidates, has no terrors for the electors, who are sure in any case to secure an acceptable representative, and it is to be remembered that it is in the interests of the electors, not of the candidates, that elections are carried on.

The objection has been brought against this method of voting, as well as against the Limited and the Cumulative vote, that it makes no provision for the filling of vacancies. A vacancy should under any scheme, be filled by the action of the special constituency whose candidate retires. But where this constituency is scattered through the whole body of electors a special appeal to them is of course impracticable. The experience of the committee, however, enables us to show that if the original ballots are preserved, a vacancy can be filled without holding a new election. By taking the ballots assigned to the retiring candidate as his quota, and putting with them those set down as *lost*, representing the whole number of electors who are now without a personal representative, a new count can be taken which will result in the election of a candidate acceptable to as large a proportion of the electors as could probably be brought to unite upon any one.

Let us suppose the name of Shakespeare, for instance, to be withdrawn after the election is over. His ballots and the ballots set down as lost may be counted again, as follows: —

	I.		II.		III.		IV.		V.		VI.
SHAKESPEARE . . .	[36]	–	–	–	–	–	–	–	–	–	–
BACON . . .	4	–	4	[4]	–	–	–	–	–	–	–
BYRON	11	1	12	2	14	–	14	4	18	[18]	–
MACAULAY . . .	9	1	10	2	12	4	16	6	22	12	34
THACKERAY . . .	6	1	7	–	7	[7]	–	–	–	–	–
DICKENS . . .	7	–	7	–	7	3	10	[10]	–	–	–
SCATTERING . . .	3	[3]	–	–	–	–	–	–	–	–	–
LOST	[4]	–	–	–	–	–	–	–	–	6	6
	40		40		40		40		40		40
		3		4		7		10		18	

Considering that the favorite candidates are already elected, and that Macaulay narrowly escaped election before, this may be regarded as a felicitous result. The same experiment being tried with the ballots for Overseers, resulted also in the election of the most conspicuous of the defeated candidates. This last experiment shows, moreover, that, contrary to the generally received opinion, the system of preferential voting is applicable to the choice of a single candidate. In such case it enables the party of the minority to select between two candidates of the majority, preventing a mere majority of the majority from dictating the result.

The advantages claimed for this method of voting may, accordingly, now be counted up as follows: —

1. It protects the minority from the tyranny of the majority.
2. It protects the minorities and majorities alike from the tyranny of party chiefs.
3. It permits the utmost freedom of individual action.
4. It secures the most perfect coöperation and organization.
5. It gives every elector a representative after his own heart, whom he has actually helped to elect.
6. It gives every representative a constituency who are unanimous in his support.
7. It gives the representative a certain security in the tenure of his place.
8. It affords a natural and reasonable method of rotation in office.
9. It makes it for the interest of every party to put forward its best men.
10. It makes it worth while for good men to become candidates.
11. It is equally efficient whether one candidate is to be chosen, or a dozen.

12. It is available in the filling of vacancies as well as in general elections.

13. It is easy for the elector to cast his vote intelligently.

14. It is not difficult to count the votes with precision and promptness.

15. Hardly a ballot is ultimately thrown away.

16. Every ballot is assigned just as the voter who casts it desires.

It is not easy to say how practicable this scheme would prove in public affairs. But it would probably work perfectly well in the election of members of Congress, for instance, though, for convenience, the larger States would probably have to be divided in two. The ballots would of course all have to be counted at a central Bureau. But the first sorting and counting could be done where they were cast. The labor at the central office would be great, but not greater than is performed any day in counting or sorting letters in a large post-office. But these considerations belong rather to the general discussion of the question, than to the special experiment you have asked me to relate.

It is sufficient to say, in conclusion, that although the amicable character of the contest prevented the Cambridge experiment from testing the scheme in all these particulars, it was satisfactory as far as it went. An excellent list of names was presented, representing every class among the alumni, one or two of them, at least, giving expression to the wishes of considerable numbers of persons who on another system of voting would have been simply outvoted and silenced. The scheme seemed also to have been successful in effecting a perfect freedom of action on the part of the electors. They evidently voted with a view to express their real wishes without any *arrière pensée* as to what other people were likely to do. To those whose duty it was to inspect the ballots the frankness and sincerity with which the electors had voted was most striking. Each ballot, differing from every other, was the exact expression of the personality of the elector who had cast it. The counting of the votes proved unexpectedly easy, taking only two or three hours, not nearly so much time as it had taken the committee the previous year to count the same number of votes under the old system, that of the Limited Vote, in which each elector sent in five names.

I am, very truly, your obedient servant,

WILLIAM R. WARE.

GENERAL INTELLIGENCE.

I. Home.

Current Record of the Association. It was announced in our last account of the current work of the Association, that a series of twelve lectures was to take place under its auspices, during the months of February, March, and April, 1870, at the Lowell Institute in Boston. The first lecture took place on the 22d of February, and the last on the 5th of April, two lectures a week being given during the intervening six weeks. The names and subjects of the lecturers were announced in Vol. II. The officers of the Association had every reason to be satisfied with the character of the lectures and their effect upon the local public, and it was to their great regret that they found themselves unable to obtain all of them for publication in this volume.

In accordance with the resolution of the general Executive Committee, a special committee was appointed early in March to consider the state of the science of jurisprudence in the United States, and to take proper action for enlarging the opportunities for instruction in that science in the universities of the country. The committee consists of Messrs. James M. Barnard and James B. Thayer of Boston, Mr. E. L. Godkin of New York, Professor Langdell of Harvard University, Professor T. W. Dwight of the Columbia Law School, President Woolsey of Yale College, Judge Lowrie of Philadelphia, and the Secretary of the Association. The first meeting of the committee was held on April 23d, in New York. President Woolsey and Professor Langdell were elected permanent chairman and secretary of the committee. After due deliberation, the committee resolved, "That the officers of the committee, in conjunction with the president and secretary, make arrangements for a general meeting of the Association, to be devoted exclusively to the consideration of the subject of education in jurisprudence in the United States."

The inquiry into the practical working of the system of voting by ballot in this country, to which reference was made in Vol. II., and which was undertaken at the request of Mr. John Stuart Mill for an English committee, was completed in the spring, and the replies from members of the Association and others were transmitted to England. They have been published there in a pamphlet, entitled "Testimony to the Working of the Ballot, by eminent authorities in the United States, France, and Germany." France and Germany are represented each by one witness; the United States by fourteen.

On the 21st of May, a conference was held in London between the President of the Association and the Council of the British Association, with the view to establish more intimate relations between the two associations. A full report of the proceedings of the conference is printed in this volume.

Early in June, the general Executive Committee delegated the Secretary to attend the meeting of the Western Social Science Association, held in Chicago, on the 8th and 9th of that month. The Western Association appointed a committee to confer with the Executive Committee of the American Association regarding an affiliation of the two associations.

A delegation of the Association attended and actively participated in a meeting of officers of Reform Schools held in the latter part of June at Middletown, Connecticut, on the occasion of opening the new State Industrial School of Connecticut.

The attention of the Central Bureau of the Association was engrossed during the spring and early summer mainly with collecting and preparing for publication the material for the Hand-book, for Immigrants, to which allusions have been made in the preceding volumes of Transactions. The undertaking involved much labor, and although outside assistance was procured, the compilation has been almost entirely made in the office of the Association. Its publication, necessarily delayed by the difficulties of the work itself, has been still further delayed, in order to incorporate statistics from the new national census. The interruption of immigration consequent upon the breaking out of the Franco-German war, would of itself have justified the delay.

The labors of the Committee on Education in Art, have already borne some highly gratifying practical fruit. Its plan, mentioned in the two former volumes of Transactions, of developing a higher and more general taste for the fine arts, by the introduction in the public schools of perfect reproductions in cheap form of classic works of art, has been successfully carried out, as will be seen by an article in the last part of this volume.

Mr. James M. Barnard resigned his place as Treasurer of the Association in the latter part of May, owing to his departure for Europe. His disinterested and valuable services as Treasurer and member of the Executive Committee have made his retirement a sensible loss to the Association. Since his arrival in Europe he has again rendered very useful service.

Mr. Henry Villard, Secretary of the Association, was compelled, on account of his health, which rendered a further discharge of his duties impossible, to resign his position in September. His loss has been much regretted, and no effort has been made to provide a successor, partly from economical reasons, but chiefly because it is hoped that Mr. Villard will be able to resume his highly appreciated labors.

The President of the Association returned from Europe in the middle of the same month. During his stay abroad he served the interests of

the Association both in Great Britain and on the Continent, by opening the way, as already mentioned, for regular coöperation between the American and British associations, and endeavoring to secure active aid from a number of prominent teachers and students of Social Science.

The sixth annual meeting was held in Boston, on October 12, 1870. After a few introductory remarks of the President, the Treasurer, Mr. John S. Blatchford, made his annual report, showing that the general expenses for the year were $6,816.59, and the receipts $6,583.67. He also stated that a special fund had been subscribed for the compilation and publication of the Immigrants' Hand-book. The amount received for this purpose was $4,606.40; the amount expended $3,061.38. The report of the late Secretary, Mr. Villard, was read by Dr. Lincoln. It reviewed in considerable detail the work of the office, and dwelt in encouraging terms upon the condition of the Association. In closing, the Secretary regretted his being compelled to resign his position on account of failing health, and spoke of his abiding interest in the work. The report was accepted, and a vote of thanks to the retiring Secretary, of whom many members spoke in warm terms, was unanimously adopted.

The following officers were chosen for the ensuing year: President, Samuel Eliot; Treasurer, J. S. Blatchford; Directors, James M. Barnard, George B. Emerson, Miss A. W. May, Mrs. S. Parkman, C. C. Perkins, F. B. Sanborn, and Emory Washburn, with power to fill vacancies, in accordance with which, Martin Brimmer, Wolcott Gibbs, and R. M. Mason have since been added to the committee. The President delivered his annual address, at the close of which the meeting adjourned.

The seventh general meeting was held at Philadelphia, on October 25, 26, and 27, 1870. The programme was fully carried out, with the exception of a single paper, omitted solely through a misunderstanding; and in its place, another paper not previously announced was read. One of the most interesting proceedings during the sessions, was an address on Boards of Arbitration between Employers and Laborers, by A. J. Mundella, Esq., M. P. for Sheffield. Three of the Philadelphia papers appear in this number; most of the others will be published in the next number of the Journal, soon to be issued.

The winter has been spent in office-work and correspondence. The Free Library pamphlet and Immigrants' Hand-book, as well as this volume, have been completed and carried through the press.

In January, 1871, the services which Mr. F. J. Garrison had been rendering as clerk, during the greater part of the preceding year, terminated by his withdrawal to a more responsible situation. His intelligent sympathy with the work in which he was engaged, made him remarkably useful to the Association.

The Philadelphia branch began, January 18, 1871, a series of monthly meetings, at which papers have been read, and discussions held on various social questions, with gratifying success.

COLLECTION OF CASTS.

PURPOSE.

The plan of decorating one or more rooms in our public school-houses with a collection of casts, was laid before the Educational Committee of the American Social Science Association by one of their number, about two years since. It was recommended by him, and approved by the committee, as a simple but efficient means of introducing an æsthetic element into the educational system of the United States. Casts, if selected to express the highest laws of form and the purest types of beauty, were thought to promise a favorable effect upon the mental and moral training of the young, especially if associated with their studies, that is, their daily efforts to improve themselves.

A special committee was formed to carry the plan into execution They decided to place a carefully chosen number of casts in a hall of a new school building in Boston. To this they were led, partly by the character of the building itself, and the facilities of which they were assured on the part of the school committee and the architect, but still more by the character of the school, being the Girls' High and Normal, and therefore comprising just that body of teachers and pupils with whom the experiment might be most favorably tried. The building is on West Newton Street, and the hall to contain the casts is that intended for the general gatherings and exhibitions of the pupils. It has been finished at the expense of the city, with special reference to the casts. For a series of slabs from the frieze of the Parthenon, an architrave has been constructed, resting on Doric pilasters. Between these pilasters the walls have been painted of a color suitable as a background, and brackets or pedestals of proper form have been provided for the busts and statues.

The cost of the casts themselves, their packing, transportation, unpacking, and repairing has been met by the subscriptions of a few members of the American Social Science Association, together with some persons not members. It has been a quiet movement, begun and ended under the competent direction of one gentleman in particular, whose knowledge of the best casts to be procured and the best modes of procuring them, has been of inestimable value to the enterprise.

All is now happily accomplished. The casts are in their places, and the work it is hoped they will do has been begun. It remains only to present a list of them, with the sources from which they have been obtained, and their cost, for the information not merely of those who see them, but of those who, though not seeing them, may be inclined to procure others like them, for the decoration of schools in different parts of the country.

The collection has not been made for a single school, or for a single city, but for every school and every town or village, where a similar attempt to extend and beautify our educational borders is possible.

LIST OF CASTS.

1. Frieze of the Parthenon. British Museum.

This is the chief work of the collection, not only in size but in character. From models by Phidias and his pupils. The original ran around the outside of the cella or body of the temple, about thirty feet above the base of the wall; and being under the peristyle, was at some distance from the light. It is known, however, to have been colored and gilded, and therefore much more readily seen than might be imagined. The date is about 435 B. C.

The frieze, of which the larger part is reproduced, represents the great procession on the last day of the national festival called Panathenæa. Starting from the Cerameicus, the procession wound by a long route to the summit of the Acropolis. Nearly the whole population of Attica appears to have joined in it, — some in chariots, some on horseback, some on foot; maidens bearing baskets filled with votive offerings; old men with olive branches, and in the midst a ship, from whose mast hung the peplus, a crocus-colored garment embroidered with mythological figures, the tribute of the Athenian maidens, or rather of the whole Athenian people, to the goddess Athena. The ceremony of delivering the peplus to the archon and priestess of the temple, with the Olympian deities seated on either side, is represented in that part of the frieze above the stage in the exhibition hall.

2. Caryatid. British Museum.

One of six figures supporting the southern portico of the Erechtheum on the Acropolis at Athens, and brought thence to England by Lord Elgin in 1814. Its erect position and straight falling draperies recall the Ionic column it replaced.

3. Diana. Louvre.

Known as Diana of Gabii, because discovered in the ruins of that city near Rome, in the year 1792. Also called Atalanta. The action is fastening the mantle on the right shoulder. The statue probably dates from the fourth century B. C.

4. Venus. Louvre.

Called of Milo (the ancient Melos), where it was found in 1820. As the drapery at the back is only blocked out, the statue must have stood in a niche or against a wall. The action has been variously interpreted. One writer thinks the apple of Paris was held in the left hand, while the drapery was sustained by the right; another thinks the left arm and hand supported a shield resting on the thigh, while the right hand was free for the inscription of fallen heroes. It is probably of the fourth century B. C.

5. Polymnia. Louvre.

Found in Italy, and restored at Rome by a sculptor of that city, near

the beginning of the present century. The Muse is supposed to be leaning on a rock of Helicon.

6. Pudicitia. Vatican.

Found in the Villa Mattei at Rome. The name was applied to it on account of the resemblance to a figure so named upon Roman medals. Also called the Tragic Muse. Also supposed to be a portrait of the Empress Livia. The right hand is a poor restoration.

7. Amazon. Capitoline Museum.

Found in the Villa Mattei. The action is passing the bow over the head, as the Amazon arms herself.

8. Genius of the Vatican.

Found near Rome about a century ago. Thought by some to be a Cupid, and a copy of a celebrated work by Praxiteles; by others, the Genius of Death, as frequently figured on Roman sarcophagi.

9. Psyche. Naples Museum.

Found in the amphitheatre at Capua. One critic thinks that it represented Psyche with her hands bound behind her back. It is probably a repetition of a Greek original.

10. Demosthenes. Vatican.

Supposed to represent the delivery of a Philippic. Niebuhr suggests that it is a copy of the statue erected by the Athenians in memory of their great orator.

11. Bone-Player. Berlin Museum.

This is thought to have been a portrait, executed near the beginning of the Christian era.

The following are busts: —

12. Apollo (Archaic). British Museum.

Of an earlier period than any other work in the collection, probably the beginning of the fifth century B. C.

13. Apollo (Pourtales). British Museum.

Formerly in the gallery of Count Pourtales at Paris. It has been supposed to represent the god as the leader of the Muses.

14. Zeus Trophonius. Louvre.

This is an imitation, if not an actual specimen of the Archaic style. Zeus was called Trophonius because worshipped at the oracle of that hero in Bœotia.

15. JUPITER. Vatican.

Found at Otricoli, about forty miles from Rome. The original cannot have been sculptured before the first century of our era, as it is of marble from quarries not worked until that period. Of all known heads of the god, this is considered the most Phidian in type.

16. JUNO. Villa Ludovisi, Rome.

This head probably formed part of a colossal statue, the work of a Greek sculptor, in the fourth century B. C.

17. PALLAS. Louvre.

Styled of Velletri, because the statue to which this belongs was found there in 1797.

18. BACCHUS (Young). Capitoline.

19. ÆSCULAPIUS. British Museum.

Found in the Island of Milo in 1828, and supposed to have been executed about 300 B. C. The expression has been remarked upon as befitting the great Healer.

20. HOMER. Capitoline.

21. PERICLES. Vatican.

22. AUGUSTUS (Young). Vatican.

MODE OF PROCURING.

The above were ordered as follows:—

Nos. 1, 2, 12, 13, 19, from D. Brucciani, 40 Russell Street, Covent Garden, London.

Nos. 3, 5, 7, 9, 11, 14, 17, 22, from Bureau du Moulage, Palais du Louvre, Paris.

Nos. 6, 8, 10, 15, 16, 20, 21, from L. Malpieri & G. Candiotti, Rome. (To be addressed through United States consul or banker.)

Nos. 4 and 18 were purchased of Paul A. Garey, 6 Province House Court, Boston.

STATEMENT OF COST.

Subject.	Where ordered.	Original Cost in Gold.	Expense of Importation.	Total Cost.
1. Frieze of the Parthenon	London.	$336.62	$449.81	$786.43
2. Caryatid . . .	London.	30.00	39.34	69.34
3. Diana . . .	Paris.	24.00	41.50	65.50
4. Venus	Purchased in Boston.	–	–	–
5. Polymnia . . .	Paris.	24.00	41.50	65.50
6. Pudicitia . . .	Rome.	37.60	104.12	141.72
7. Amazon . . .	Paris.	40.00	53.20	93.20
8. Genius of the Vatican .	Rome.	5.60	18.29	23.29
9. Psyche . . .	Paris.	1.60	2.50	4.10
10. Demosthenes . .	Rome.	32.20	88.22	120.42
11. Bone-player . .	Paris.	8.00	15.85	23.85
12. Apollo (Archaic) .	London.	2.50	3.30	5.80
13. Apollo (Pourtales) .	London.	5.00	6.23	11.23
14. Zeus Trophonius . .	Paris.	.96	1.60	2.56
15. Jupiter Otricoli . .	Rome.	5.00	15.21	20.21
16. Juno	Rome.	8.00	27.08	35.08
17. Pallas . . .	Paris.	4.00	7.85	11.85
18. Bacchus (Young) . .	Purchased in Boston.	–	–	–
19. Æsculapius . .	London.	5.00	6.23	11.23
20. Homer	Rome.	2.40	10.41	12.81
21. Pericles . . .	Rome.	2.40	9.66	12.06
22. Augustus (Young) .	Paris.	1.60	7.30	8.90

"Expense of Importation" includes premium on original cost, packing, shipping, freight, insurance, wharfage, delivery, unpacking, and repairs.

NATIONAL EDUCATION, as distinct from state or local education, has been advocated, and particularly at Washington, with renewed animation. There is no avowed intention of doing away with local schools, or even of interfering with them, except where they fail to meet just demands. But it is suggested that the General Government has opportunities of its own to develop our educational system, and that it is bound to avail itself of them.

Such is the tone of the Report of the Commissioner of Education, a volume of 579 pages, in which statistical and other information respecting the schools and colleges of the country is interspersed with papers upon special subjects from other pens than the Commissioner's. We welcome the report, not so much for its performance, as for its promise, trusting, as we do, that it will be followed by other reports embodying whatever facts can be gathered from any quarter respecting our educational insti-

tutions. We need an office somewhere, and nowhere more naturally than at Washington, to which the various reports of Superintendents, Boards, and Committees may be sent, and from which an abstract of the work described in them may be laid before the nation. But we should regret any disposition on the Commissioner's part to magnify his office, or that of the Government, to such a degree as would cause the slightest collision between it and the State or municipal authorities under which our schools have been established, and by which they can be administered far better, in our judgment, than by any national officials. The Commissioner says, —

"There are certain things which the National Government may and should do in this relation, so palpable that their statement is sufficient to secure almost universal assent: 1. It may do all things required for education in the Territories. 2. It may do all things required for education in the District of Columbia. 3. It may also do all things required by its treaties with and its obligations to the Indians. 4. The National Government may also do all that its international relations require in regard to education. 5. The National Government may use either the public domain or the money received from its sale for the benefit of education. 6. The National Government may know all about education in the country, and may communicate what it knows at the discretion of Congress and the Executive. 7. The Government should provide a national educational office and an officer, and furnish him clerks, and all means for the fulfilment of the national educational obligations."

Here we hope the Commissioner will be disposed to rest. He will not go on to press a national system of education wherever a local one can be started. He will not recommend a great staff, or extensive quarters, or considerable expenditures for his bureau. He will not try to turn himself into an administrative official, but be content to record what is passing, and rely upon the simple facts of his reports to excite interest and activity throughout the country. That is to say, he will not do all this, if his view of the work before him be what we should desire for his own sake as for the country's.

A bill to establish a system of national education, as such, which has been before Congress more than a year past, goes much farther than the Commissioner's Report. It exempts from its operation every State already providing a common-school education for all its children of school age. This leaves every other State at the mercy of the bill should it ever become a law. Every other State means, in plain English, every Southern State, where public education is defective, and where the General Government is to be called in to set matters right.

The bill proposes the appointment of a State Superintendent for each State by the President and Senate of the United States, for a term of four years; a Division Inspector for each division (of which there are to be as many as the number of Representatives in Congress for the State), whose duty it shall be to visit schools as often as once a year, and report to the State Superintendent, who is to be appointed by the

Secretary of the Interior, and to be removed at the Secretary's pleasure. Local Superintendents for each school district (of which there are to be as many as convenient) are also to be appointed by the Secretary of the Interior; their duty being to hire, purchase, or build school-houses, keep them in repair and warmed, and to engage teachers, generally with the approval of the State Superintendent. The number of schools is to be as the State Superintendent directs, provided that it be sufficient for at least six months' instruction to every child between six and eighteen years of age, unless where the country is so sparsely settled as to render the establishment of permanent schools impracticable.

To meet the expenditures of this new system, a direct tax is to be apportioned among the States; those States already providing an adequate educational establishment being exempted from their share of the tax, as from other operations of the bill, and every homestead being exempted to the amount of $1,000 in the States for which the tax is levied.

Such is the substance of a bill which, if it takes effect even within a single State, will go far either to change or to confirm in a remarkable degree the public sentiment in regard to education. In one case, the charm of so many additional appointments, so many fresh opportunities for exercising the national authority for the benefit of individuals, will dispel all sober precedents and fill the popular mind with desire that the system may be extended. In the other case, the attachment of the people to their existing institutions, to the control which they have held, and to the efforts which they have been wont to make in relation to their schools, will be signally strengthened by the spectacle of a State given over to inspectors and tax-gatherers from Washington. We have no doubt as to the result. If education languishes anywhere, it must be revived by other processes. If schools are to be planted, if a school system is to be put in motion, if a community indifferent to intellectual things is to be stirred with desire after them, the seed must be sown on the spot itself, and the harvest gathered there.

Illiteracy of Women in the United States. The most elaborate paper in the Report of the Commissioner of Education for 1870, is one taken from his special report on education in the District of Columbia, the subject being Illiteracy in the United States, and the writer Dr. Edwin Leigh. We find something which bears so directly upon points adverted to in the preceding article, as to be properly inserted here.

Dr. Leigh remarks upon the particularly serious and threatening aspect presented by the large excess of what he calls female illiteracy in the United States. The tables, or views, in which he displays this fact, deserve to be attentively examined; but without being reproduced in in these pages, their results can be intelligibly stated.

It seems, then, that while there are differences among the different parts

of the country, the general rule is that there is a preponderancy of ignorant women everywhere. The average is from one hundred and forty to one hundred and fifty females to every one hundred males, among the illiterate. Nor this alone. Although the proportion of illiterate women decreased six per cent. throughout the country from 1850 to 1860, the proportion increased 11 per cent. in Maine, 53 in New Hampshire, 27 in Vermont, 34 in Massachusetts, 33 in Rhode Island, 16 in Connecticut, 10 in New York, 10 in Delaware, 37 in District of Columbia, 9 in Georgia, 3 in Alabama, 3 in Florida, 5 in Mississippi, 5 in Louisiana, 5 in Texas, 5 in Arkansas, 33 in Wisconsin, 32 in Minnesota.

These are significant figures, and they point even more directly than the needle to the pole, to the necessity of taking a fresh start in the so-called development of women. It is plain enough that the first thing they need is not the suffrage, not the professions, not the public offices, but the alphabet. "In my opinion," says one of Miss Austen's heroes, "Nature has given women so much, that they never find it necessary to use more than half." That's just the trouble, and until women learn that they, as well as men, must use the whole, they will continue to suffer. We commend to women's clubs, women's journals, and women's platforms, education, simple education, as the one thing needful to the sex, and as needful in the United States as throughout the civilized or uncivilized world.

Simmons Female College. One man has lately seen the need of female education, and provided for it with singular munificence. The late John Simmons of Boston was a manufacturer of ready-made clothing, and employed great numbers of workwomen, few of whom could do their work in such a manner as to obtain a decent livelihood. It was not employment, but training, which they required most, and when he made his will, he remembered them and their necessities. At his death, in 1870, it appeared that he had founded a Female College for the purpose of teaching medicine, music, drawing, designing, telegraphy, and other branches of art, science, and industry best calculated to enable the scholars to acquire an independent livelihood. This he endowed with $1,400,000, subject to the payment, during life, of a portion of the net rents and income to certain persons now living; the whole "to be held as a permanent trust fund, not to be reduced or impaired, and only the net rent and income thereof to be applied from time to time to the support of said college and to the payment of its current expenses;" but income may be accumulated, and as soon as the accumulation reaches the sum of $300,000, the trustees are authorized to buy land, or buildings, or furniture and apparatus. If the Simmons Female College does anything towards supplying the training which thousands upon thousands of women need to save them from poverty, or worse than poverty, the memory of its founder will be blessed indeed.

His experience is the same with that of every one who has occasion to employ women. Let a woman, and one whom all will believe, Florence Nightingale, speak for her sex: —

"I might say we are beset with offers of places for trained nurses and trained superintendents, and we cannot fill them. I would I could go out into the highways and hedges, and compel them to come in. How often I have known Pastor Fliedner, of Kaiserswerth (he is now gone to his glorious rest), say, when thus pressed by calls from pastors, and from directors of institutions, out of all parts of Germany, 'You ask me for deaconesses. Has your district furnished us with any probationers? No; not one. Then, am I to give you the finished article, and you not to give me the live material? Am I to raise deaconesses out of the ground by a stamp of the foot?'

"People cry out and deplore the unremunerative employment for women. The true want is the other way. Women really trained, and capable for good work, can command any wages or salaries. We can't get the women. The remunerative employment is there, and in plenty. The want is the women fit to take it.

"Three fourths of the whole mischief in women's lives arises from their excepting themselves from the rules of training considered needful for men."

Deaf-mute Instruction. In addition to the statements made in the last number of this Journal, it may properly be mentioned that there are now three day-schools for deaf-mutes in the United States, one at Boston with nearly forty pupils, taught by articulation; one at Pittsburg with upwards of twenty-five pupils, taught by signs, and a small school at Chicago with about a dozen pupils, taught by articulation, on the German method, — the instructor being a former teacher in the celebrated Jews' school at Vienna. It is proposed to open other schools of this sort at Cincinnati, Cleveland, and perhaps other cities. The older establishments for teaching deaf-mutes are all crowded with pupils, except, perhaps, in some of the Southern States, where this branch of education has suffered from the results of the civil war. In the Northern States it is probable that there are now nearly twice as many deaf-mutes under instruction as was the case ten years ago. The Clarke Institution at Northampton, Massachusetts, has now entered upon the estate bequeathed by its founder, Mr. John Clarke, and has built convenient halls for its pupils. The collegiate establishment at Washington for the higher education of deaf-mutes, goes on successfully, under the charge of Mr. E. M. Gallaudet. A convention of the American instructors of deaf-mutes, was held at Indianapolis last August, which was fully attended, and the proceedings of which, published by the Indiana Institution for deaf-mutes make a useful volume. The president of this convention, Rev. Collins Stone, head of the oldest deaf-mute school in the country, the American Asylum at Hartford, was killed not long afterward by a deplorable accident. He has been succeeded at Hartford by his son, Mr. Edward C. Stone.

HOSPITAL FOR THE RUPTURED AND CRIPPLED, NEW YORK. The following description of this wise and efficient charity is taken from a report recently made to the Health Department of our Association, by Drs. D. F. Lincoln and C. J. Blake: —

"Exclusive of private rooms, the building is designed to accommodate two hundred children between the ages of four and fourteen, afflicted with the various diseases of deformity so common in badly nourished children. It consists of a parallelogram of one hundred and fifteen by forty-five feet, with semicircular wings of twenty-two feet in diameter at three of the angles, and a rectangular wing, thirty-two by twenty-two feet, at the northwest angle.

"The basement is devoted to the uses of the Out-patient department, and to various domestic arrangements. The first story contains the main entrance, reception-room, committee-room, physician's residence, and a number of small private rooms for patients. Passing through to the rear, that is, to the north side, we come to a tower, containing an iron staircase and elevator, which can be shut off from any part of the main edifice by means of iron doors, thus forming an efficient fire-escape. The second and third stories open almost directly upon this tower, thus obviating the necessity of entries; and each of these stories forms one immense ward, of the same dimensions as the ground-plan of the house, with an almost unbroken exposure to light on the south, or main front, as well as on the east and west.

"The upper structure, of similar dimensions, is roofed with a series of domes, which furnish a ready accessory means of ventilation to the whole house. This 'garden,' or 'solarium,' is used exclusively as a play-ground, for which its sunny and airy situation excellently fit it.

"Points deserving especial mention, as worthy of commendation, are: —

"1. Economy of room. There is no large reception-room; one of about eight feet by fifteen answers all the purpose. There are no halls required in the upper stories.

"2. Provision for ventilating the kitchen, laundry, and engines, apart from the main body of the building.

"3. Security in case of fire, by means of the iron stair.

"4. The semicircular shape and small size of the wings, which cut off as little sunlight as possible from the main building.

"5. The admirable play-ground, situated under the roof, yet (owing to the peculiar construction of the latter) not liable to become overheated in summer. The apparatus for gymnastics is of the simplest character, comprising little else than a few self-acting swings, of a new construction, for developing the arms, the parallel bars, for the muscles of the shoulders and spine, and some hobby-horses, moved by a treadle, for developing the use of the ankles and legs.

"6. The peculiar arrangement of the great wards. Save a small space, partly inclosed at the corners, serving for the children's wardrobe, the entire floor, one hundred and fifteen by forty-five feet in extent, is thrown into one room. Down the centre of this room runs a sort of aisle, about twenty feet wide, which affords ample space for the children's desks — for they receive regular school instruction. A wooden barrier about three feet high separates this aisle, on each side, from the spaces designed for the children's beds, the girls being placed on the front side of the house, the boys on the back. About forty low beds in one *pen* (so to speak), and the same

number in the other, accommodate these children. All are young — and the twenty-foot aisle, with the three-foot breastworks, are considered sufficient barriers between the sexes. The air of these rooms seemed as wholesome as possible, in most refreshing contrast to the peculiar foulness which clings to our great city schools. The physician remarked that he never despaired of any child, if it could be made to *eat;* and they *always* began to eat heartily, led by the force of example, within a few days after their entrance. Cheerfulness, fresh air, sunlight, cleanliness, plenty of food, — these constitute his most important remedies. He claims a very unusual degree of success in treating abscess of the hip-joint, caries of the vertebræ, bed-sores, and the like. And this leads directly to the next point: —

"7. Beds. The children all sleep on a kind of spring-bed, the frame of which is cast iron, and the 'ticking' is composed of fine links of wire interlaced in the manner of chain-armor. This peculiar fabric is very strong, elastic, and agreeable to the body. No mattress is required; a blanket once doubled and covered with a sheet furnishes a sufficient and comfortable couch. In the case of children with running sores, the blanket is always washed daily, which would be impossible in the case of any mattress. No rubber blankets are used; and this seemed a very desirable omission. The iron fabric ('woven wire mattress') is coated with tin to prevent it from rust, and is easily cleansed. The physician values the bed very highly as a means in the cure of bed-sores; and evidently the cleanliness, good ventilation, and suppleness of the mattress are most desirable qualities.

"8. Ventilation. This is effected in the downward direction. Warm air is introduced at the top of the room (in winter), and conducted out through registers in the floors; the latter, as well as the main walls, are made double, to serve as conductors of air. The upright spaces in the walls are warmed by the kitchen chimney and the engine chimney; the upward draught thus caused creates a suction, through the floors, upon the air in the room, while fresh air (warmed by coils of steam-pipe) is constantly forced in near the ceiling. In summer, the large end-windows furnish ample means of ventilation. They would be inadequate if the rooms were as crowded as our school-rooms. But the size of the wards gives an amount of air to each child which would be a liberal hospital allowance for an adult ward. The whole ward, moreover, is emptied at play hours. It is claimed that in cold weather the upper air of the room scarcely differs at all in temperature from the lower strata.

"9. As a matter of administration, it struck us that a most desirable principle was followed in representing to each patient his duty to pay — in proportion to his means, be they never so small — a compensation for the service rendered. He is first cared for, and then the appeal is made to his sense of justice. The pecuniary result is not insignificant, but is not to be compared in importance with the moral lesson. Upon the great benefit rendered to the community, in preventing pauperism and making useful workers of poor cripples, this is not the place to enlarge."

Board of Health of Massachusetts. At a recent meeting in London, to aid the Hospital for Sick Children, Lord Derby said, "I will simply give you one thought to carry away. We talk about the waste of life in war; do we ever think of the waste of life in peace? I doubt if the most sanguinary battle ever fought has swept off as many human

beings as die in England in one year from preventable causes." What is true of England is also true, though not perhaps to precisely the same degree, of this country. We are losing every year lives that might be spared, were sanitary science to get the control of our laws and customs, at which it grasps in vain.

The State Board of Health of Massachusetts is doing its duty by the community which established it. Its Second Annual Report, dated January, 1871, describes its operations, particularly the special investigations made under its direction during the past year. The subjects investigated are Poisoning by Lead, Trichiniasis, Health of Towns, Charbon or Malignant Vesicle, Typhoid Fever, Homes for the People, Alcoholic Drinks, Mortality of Boston, Ventilation of School-houses, Mystic Pond Water, Air and some of its Impurities, Health of Minors in Manufactories, and Use of Milk from Diseased Cows; and the inquiries have been conducted by the Secretary of the Board, Dr. George Derby, Prof. Wm. R. Nichols, Drs. Arthur H. Nichols, F. W. Draper, Messrs. A. C. Martin, A. H. Pearson, H. B. Hill, and Charles Stodder, aided in some points by numerous correspondents. Two hundred physicians, in as many different towns, are stated to have contributed information on the subjects under investigation. It is evident therefore, both from the importance of the subjects themselves, and from the mode in which they have been examined, that the report is one of more than common value.

In the paper on the Health of Towns, we find a letter addressed by the Consulting Physicians of the City of Boston to the Mayor and Aldermen, from which, as not standing by itself in the Report of the Board, we are the more desirous to make some extracts, lest it escape a cursory inspection of the volume.

"Among the first requirements for public health in a crowded city are sewerage and pavement, — such sewers as will cause all the foul liquids to flow away by force of gravity, and such pavement as will prevent all soakage into the soil. To obtain these in perfection is a work of time, of great cost, and of the highest engineering skill; we cannot hope to have them changed except by slow degrees, and by such processes as have for many years been going on in Boston with public approval.

"But there are other means of protecting public health easily reached, and whose benefits might be at once enjoyed by the citizens, to which we would invite your attention, as we deem them to be of great importance.

"Our streets are not clean. It is perhaps unfortunate for sanitary progress in Boston that comparison in this respect with New York is so readily made. We return from that city congratulating ourselves on the superior cleanliness of Boston streets, which no one can question, but sometimes forgetting that the standard of comparison is a very low one. The Metropolitan Board of Health of the city of New York have already accomplished a sanitary work from which other great cities may learn many useful lessons.

"They have reformed the tenement-houses, suppressed dangerous epidemics, cleaned and disinfected the vaults, and removed or regulated all offensive trades; but the streets have been always entirely beyond their control, and the

Board of Health are not in the least degree responsible for their condition. Street-cleaning in New York is a corporation job. There can be no doubt that, in so far as the streets are concerned, New York is the most filthy great city in the civilized world. Our standard of comparison should be the streets of the great cities of Europe, which are as much cleaner than the streets of Boston, as ours are cleaner than those of New York.

"The dirt of the streets of Boston is made up, in great part, of the excrement of horses. This is allowed to accumulate, being alternately dried by the sun and air and soaked by the rains and watering carts, until it forms a foul and dangerous compost, tending directly, through the air with which it is in contact, to the production of disease. The interests of public health require that it be removed with much greater frequency than is now practiced. We are of opinion that, during the summer and early autumn, every street in the city should be cleaned once in twenty-four hours, and the great thoroughfares by night. There are, in all parts of Boston, filthy back-yards, alleys, and passage-ways, broken-down and overflowing vaults, and, in the older portions, disused wells and cisterns, which are receptacles for dirt. All these nuisances should be reformed.

"Offensive trades, like fat-melting and bone-boiling, are carried on in open vats in the midst of a crowded population. They should be compelled to use methods, tried and approved in New York, by which the sickening vapors may be entirely consumed. The authority to control these trades is given by statute.

"House-offal, or swill, is allowed to become putrid before removal from the houses of the citizens. The offal is a source of profit, being kept by special ordinance free from mixture with ashes, which would tend to prevent its becoming offensive; but this enforced division of refuse material makes it the more obligatory upon the city authorities to take the dangerous portion away before it undergoes decomposition. In our opinion public health requires that house-offal should be removed in summer and early autumn, every day from every house.

"Our tenement-houses are in a condition discreditable to a civilized community. It is only necessary to visit Friend Street Court, or the 'Crystal Palace,' in Lincoln Street, for any citizen to see under what desperate circumstances the occupants of these and hundreds of other similar houses are compelled to live. Their rents are enormous, and their condition calls for the relief which the legislature of 1868 intended to afford them through the Tenement House Law. This law has been a dead letter, but the interests of public health require that it be enforced without delay.

"It is now no one's duty to inspect the fresh provisions offered for sale in Boston, while the law provides for the destruction of all which are unsound, and of all meat of any calf killed when less than four weeks old. We believe that public health requires the enforcement of these laws; and we would respectfully suggest that a systematic inspection of meats, fish, vegetables, and fruits be made by city authority in a manner similar to the inspection of milk, which has proved to be so useful."

The Board sent out a large number of circulars containing the question: "What in your judgment, has been the effect of the use of intoxicating liquor as a beverage upon the health and lives of the people in your

town, or in the region in which you practice." One hundred and sixty-four replies were as follows: —

Very destructive to life and health	48
Injurious in a greater or less degree	49
Public health not affected by use in their towns	16
The people of their towns very temperate	27
Intoxicating drinks not used in their towns	5
The effect is bad upon foreigners in their towns, but not upon natives	4
Useful in the decline of life	1
Use promotes longevity	1
Indefinite replies	13

Circulars were also sent to representatives of the United States abroad, ministers and consuls, inquiring concerning the intoxicating articles used in foreign countries, and the effects produced by them upon the health and happiness of the people, asking for some comparison between them and the people of the United States. A few of the answers are suggestive and valuable.

From a letter addressed to the Board by the chairman, Dr. H. I. Bowditch, we shall present some striking facts respecting the Industrial Dwelling Company of London. But this belongs under our Foreign Intelligence.

National Board of Trade. The proceedings of the third annual meeting of this body, held in Buffalo last December, have been published in a handsome form. An introductory note commends the volume to all who desire information concerning the views of representative business men in relation to the financial questions of the day, and we cordially repeat the recommendation.

The President, Mr. Fraley, remarked in his closing address: "I think that the great influence of this Board is to arise quite as much from its deliberations as from its votes. Any vote that we can give is merely recommendatory; but our discussions must penetrate not only to the hearts and minds of those who are to legislate for us, but also into the hearts of the people." It may be difficult to see the immediate, but it is not difficult to foresee the ultimate results of such meetings as these. The words uttered in them, and carried by the press to every part of the country, are like the seeds which the wind scatters far and wide, and from which growths otherwise unaccountable shoot up in after time.

Debates on strictly financial topics like Restrictions on Internal Trade, Tariff Reform, Revenue Reform, Restoration of the Specie Standard, and International Coinage, were far from absorbing the attention of the Board. Questions of administration and legislation, lying back of purely commercial interests, but vitally connected with them, such as the Franking Privilege, Land Grants, and the Civil Service Reform, were taken up with more or less earnestness.

The last named subject was not so fully considered as would have been desirable, but the vote on the adoption of the following resolution was unanimous in the affirmative: —

"*Whereas*, The National Board of Trade, at its annual meetings held at Cincinnati in 1868, and at Richmond in 1869, formally approved and recommended Congressional action to secure increased efficiency in the civil service of the United States; and whereas the judgment of the Board, harmonizing with the general sentiment of the country, is becoming more strongly confirmed in favor of such reform; therefore,

"*Resolved*, That in the opinion of this Board, the question of the condition of the civil service, and of the necessity of its reform, has become one of vital and paramount importance, and that the moral and material interests of the country are pressing for the early passage by Congress of a proper civil service law."

On Land Grants there was a long and animated debate. A proposition to limit them to actual settlers was followed by another favoring donations to railroads and canals, and between these two the Board was so much divided as to be unable to decide the point at issue. But in the course of the discussions a great many things were said which we should like to quote, and one thing we will quote from a Boston delegate: —

"Capital is accumulating, gigantic fortunes are being built up; and I venture to say, that all demands for capital will hereafter be supplied by the means in private hands, without any need of recourse to the Government. But if that should not be the case, and Government aid should be required, then the Government should lend its credit. I would much rather that the Government should lend bonds than give away the public lands, which can never be reclaimed. Let these lands be held by the Government as trustee, to be given only to actual settlers."

It is, however, on commercial questions that the National Board of Trade is entitled to be heard with most respect. Let it deal with them both thoughtfully and practically, and it cannot fail to bring about a peaceful solution of the doubts and controversies in which the trade of the nation is now involved.

State Boards of Public Charity. — In the second number of the Journal we gave such information as was then in our possession concerning the organization and work of the State Boards of Public Charity in this country. Seven States, Massachusetts, Ohio, New York, Rhode Island, Illinois, Pennsylvania, and North Carolina, now have these boards established, and in California, Michigan, Wisconsin, and probably other States, steps have been taken to establish them. The seven boards now existing have all published reports; the Massachusetts Board has published seven annual volumes, from 1865 to 1871, and two special reports; the Ohio Board has published four annual reports; the New York Board three, the Rhode Island Board two, the Illinois and North Carolina Boards each one. The Pennsylvania Board, in consequence, apparently, of an

unfortunate controversy among its members, has prepared no regular report for 1870, but has issued several special reports. We will briefly consider in each State the present condition of them in reference to these boards.

Massachusetts. — This is the first State to establish such a board; of the original members appointed in 1863, three are still in office, Messrs. Allen, Earle, and Sanborn; the Chairman, Dr. S. G. Howe, was appointed in 1864, and the General Agent, Mr. Wrightington, though a member only since July 1868, was a deputy of the Board from its origin. The other member of the Board, besides the secretary, is Mr. Moses Kimball, appointed in 1868, but for many years previous connected with the public charities of Boston, and a prominent member of the Legislature. The Secretary, Mr. Edward L. Pierce, who has recently resigned his office, was appointed in 1869. It thus appears that this Board possesses, in the experience of its members, a great capacity for intelligent and authoritative opinions on the subjects with which it deals, and its seven thick volumes of facts, arguments, and statistics are generally recognized as an important contribution to Social Science. They have also served to modify greatly the legislation concerning public charity and penal discipline in Massachusetts, and the general labors of the Board have produced many changes in the administration of the public establishments throughout the State.

The opposition which the Board naturally encountered in its first year has gradually ceased, while its field of practical work has been much extended by the recent establishment of two new agencies. These are the "Visiting Agency," which looks after the children discharged from the State institutions, and those brought before the courts for misdemeanors; and the "Agency for the Sick State Poor," which supervises the local relief given to the State poor in the towns and cities of their residence. The Visiting Agency, temporarily established by the Board in 1866, was made permanent by law in 1869, and, since August in that year, the Agent has been Mr. Gardner Tufts, who has organized his work with great diligence and good judgment, and accomplished results which are very gratifying. He has reduced the average number of boys in the public reformatories more than a hundred in a year and a half, and within the past year has reduced the number of children in prison almost as much. The children thus kept out of prisons and reformatories are mostly placed in good families within the State, and are much better off than they would be if imprisoned, while the community is equally well protected from their vicious tendencies. At the same time, some fifteen hundred or two thousand children sent out into families by the State institutions within the past few years are regularly visited and looked after by the officers of the agency. No department of the public service in Massachusetts is believed to be more directly instrumental in reforming the morals of the dependent and criminal classes than that of Mr. Tufts.

The Agency for the Sick State Poor performs another and scarcely less important work which had been too long neglected, as that of the Visiting Agency had been. The present Agent is Mr. Henry B. Wheelwright, who has been long connected with the administration of the State Charities of Massachusetts, and was for five years a member of the State Board. During that period a law was passed allowing the State poor, whose health would be endangered by removal to an almshouse, to be supported in the city or town of their residence; and the present agency deals with the subjects of the law, who now number some sixteen hundred persons in a year, residing in all parts of the State, and suffering from every species of disorder prevalent in Massachusetts. The nature of the supervision required is such as to make the agent acquainted with the sanitary condition of all the large towns and cities of the State, and of the dwellings of the suffering poor everywhere; and he is the first State official who has been brought into this familiarity, at once general and practical, with the local maladies and sanitary wretchedness of all regions of the State. He also has occasion to witness the phenomena of pauperism in their most remote manifestations, and has accumulated many observations on these matters which are valuable to the student of Social Science.

The reports of these agents are annexed to the general report of the Board, for 1870, as those of the Secretary and General Agent have always been. The report of the Board itself is mainly devoted to the discussion of cardinal principles and general statements concerning the charitable and reformatory work undertaken by the State authorities. It records further progress in the way of classifying the persons who are subjects of State charity or correctional restraint, and points out the gratifying fact that these are not increasing so fast as the general population increases. The report of the Secretary, Mr. Pierce, gives the usual information, statistical and special, concerning the State institutions and beneficiaries, reviews the legislation of the past year, and particularly considers the topics of executive pardons and habitual criminals, in regard to which Mr. Pierce's past experience as a prosecuting officer of the State has given him much information. The report of the General Agent, Mr. Wrightington, devotes special attention to immigration, and includes some useful statistics concerning that and other matters. The whole collection of reports makes a volume of more than five hundred and seventy pages, not inferior in value or interest to any of the preceding six volumes.

Rhode Island. — The Board of Charities of this State was established in 1869, and made its first report early in 1870, a brief pamphlet, written mainly by Dr. E. M. Snow, the Secretary, who is widely known for his medical and statistical writings. Like the Chairman of the Board, Mr. T A. Doyle, and some of their colleagues, he has been long connected with the public charities of Rhode Island. The second report of this Board, though presented to the Legislature, has not been received by us. It will

no doubt contain the history of the new State almshouse, asylum for the insane, and workhouse at Cranston, near Providence, which establishments are under the direction of the Board.

Ohio. — The Board of Charities in this State does not possess any administrative or executive functions, as do those above mentioned, but simply exercises supervision over the State and county prisons, almshouses, and charitable institutions, in regard to the management of which, its reports have contained many useful suggestions. The Chairman of the Board is Mr. John W. Andrews, of Columbus; the Secretary, Rev. A. G. Byers, of Columbus. The fourth report, for 1870, is a pamphlet of one hundred and twenty pages, and contains, among other things, a plan and specifications for a model county almshouse, suited to the public wants of Ohio; statistics of the paupers and prisoners in the several counties; descriptions of the actual establishments in which they are kept; and reports on the charitable institutions of the State. The document must be very useful as a guide to legislation and charitable administration in Ohio, and is not without value to the student of Social Science.

Illinois. — The first report of the "State Commissioners of Public Charities" of Illinois differs from that just mentioned in dealing more with the principles of public charity, and the general facts as observed in Illinois and other States, concerning the different classes of dependents. It forms a volume of nearly three hundred pages, and records the investigations of the Board for two years. The Chairman of the Board is Elmer Baldwin, of La Salle County, and the Secretary is Rev. F. H. Wines, of Springfield, who writes the report. It contains a great many social statistics concerning the State of Illinois, not previously made public, and shows among other things, that the proportion of insane and imbecile or idiotic persons to the whole population is much greater there than has commonly been supposed. The number of paupers and criminals, however, is much less than might have been expected, and shows either that the returns concerning them are imperfect, or that their number is much less than of the corresponding classes on the seaboard States, which we know from other sources to be the fact. The report contains much able discussion of general principles, and a great collection of facts of various kinds concerning the subjects and establishments of charity in the State.

New York. — The report for 1870 of the Board of Public Charities in this State has been submitted to the Legislature, but not received by us. It is understood to be from the pen of Prof. T. W. Dwight, and to be followed by a report of the Secretary, Dr. Charles S. Hoyt, and to make a volume as large as the report of the Illinois Board.

Pennsylvania. — The controversy above mentioned as occurring among the Commissioners of Public Charities in this State, though it has prevented the publication of a report for 1870, does not seem likely to frustrate the purposes for which the Board was created. The Secretary, Dr. Wilmer Worthington, and the Corresponding Secretary, Dr. A. J

Purt, have carried on their investigations respecting the general subject given them to consider, and will, no doubt, at the end of the present year, make a report worthy of the magnitude of the interests with which the Board has to deal.

North Carolina. — A report of the Board of Charities here was published in the summer of 1870, and a second report is understood to be now in preparation. The first report was preliminary, and by no means extended, but communicated some interesting facts concerning the charities of North Carolina. The Chairman of the Board is Mr. W. J. Palmer; the Secretary, Rev. G. W. Welcker.

Representatives of nearly all these State boards met at the Prison Congress in Cincinnati, last October, and took part in its deliberations. By correspondence with each other a certain harmony of opinion and concert of action is kept up between the boards in different States.

National Congress on Penitentiary and Reformatory Discipline. In December 1869, a call, with ninety-one signatures, was issued for a convention or conference under the above designation. On the 12th of October, 1870, the Congress convened in the city of Cincinnati, Ohio, and was organized by the appointment of his Excellency, R. B. Hayes, Governor of Ohio, as President, with twenty-seven vice-presidents and four secretaries.

The number of States represented in the Congress was twenty-three, together with the Dominion of Canada and the Republic of Colombia, South America. The whole number of delegates was two hundred and thirty-six, of whom two were governors and two ex-governors of States; nineteen were deputies of governors, representing them personally; thirty-eight were heads of penal and reformatory institutions; forty-eight were directors of such institutions; sixteen were chaplains, and six physicians of the same; nine represented social science and prison associations eight held the position of special prison commissioners in their respective States; eleven were secretaries and members of boards of State charities; and others were variously connected with and interested in the work of prison reform. Thirty-seven papers were read, of which twelve were contributed from foreign countries. These papers were nearly all written by specialists; were, for the most part, of great ability; and together, traversed almost the entire circle of questions connected with penitentiary science and discipline. The Congress continued its sessions for nearly a whole week, and the interest was not only sustained, but increased, to the end. The time was about equally divided between the reading of papers and the discussions growing out of them. The proceedings have been published in a volume of six hundred and forty-two pages, and form the richest and most valuable contribution ever made in this country to the literature of penology.

Three practical results were reached by the Congress.

1. Action was taken, looking to the formation of a national association for the promotion of criminal law reform and penitentiary and reformatory discipline.

A committee of twelve was appointed to take charge of this project and carry it into effect. The committee consists of the following gentlemen: Ex-Governor Seymour, Prof. Theo. W. Dwight, and Amos Pilsbury, of New York; Governor Baker and C. F. Coffin, of Indiana; Governor Hayes, of Ohio; Ex-Governor Haines, of New Jersey; Hon. Speaker Blaine, of Maine; F. B. Sanborn, of Massachusetts; E. W. Hatch, of Connecticut; Z. R. Brockway, of Michigan; and G. William Walker, of North Carolina. It is understood that these gentlemen will seek an act of incorporation from the Legislature of New York during its present session, and the probability is that the National Prison Association will be organized some time during the approaching spring.

2. Action was also taken with a view to the organization of an interternational prison congress in Europe (probably London) in the year 1872.

The Congress invited the Rev. Dr. Wines to become their agent in organizing this movement, and gave the work into the charge of the same committee to which had been confided the task of inaugurating the National Prison Association. The committee has already sought and obtained the recognition and coöperation of the General Government in this enterprise. The first legislative act of the forty-second Congress was the passage of a joint resolution, authorizing the President to appoint a commissioner to the International Prison Congress, who, it is understood, will visit Europe during the ensuing summer, to confer with governments, institutions, and individuals, and secure, as far as may be practicable, their coöperation in the proposed world's conference.

3. A "Declaration of Principles," extending to thirty-seven articles, was adopted and promulgated by the Congress.

In this paper, the Congress declare that the treatment of criminals by society is for the protection of society; that the supreme aim of prison discipline is the reformation of criminals, not the infliction of vindictive suffering; that the progressive classification of prisoners should be established in all prisons above the county jail; that hope being a more potent agent than fear, rewards more than punishments are essential to every good prison system; that the prisoner's destiny should be placed measurably in his own hands, by his being put into circumstances where he will be able, through his own exertions, to continually better his condition; that prison officers ought to be specially educated and trained for their work; that sentences, limited only by satisfactory proof of reformation should be substituted for those measured by mere lapse of time; that education is a vital force in the reformation of the fallen, and should be carried to the utmost extent consistent with the other ends of prison discipline; that a system of prison discipline, to be truly reformatory, must

gain the will of the convict; that the prisoner's self-respect should be cultivated to the utmost, and every effort made to give back to him his manhood; that in prison administration moral forces should be relied on, with as little admixture of physical force as possible; that industrial training should have a higher development and a greater breadth than is now given to it; that the most valuable parts of the Irish prison system are as applicable to one country as another; that repeated short sentences are worse than useless; that preventive institutions constitute the true field in which to labor for the repression of crime; that the prison system of a State should be a unit, and hence the necessity for some central and supreme authority to sit at the helm, guiding, controlling, vitalizing the whole; and that both in the official administration of such a system and in the voluntary coöperation of citizens therein, the agency of women may be employed with excellent effect.

The volume above mentioned, containing the papers and discussions of the Congress, can be procured of the editor, to whose judicious and tireless efforts the whole value of this movement is due, the Rev. Dr. Wines. We trust he will be fully sustained in the work which he has now undertaken in behalf of the International Congress.

Prison Reform. — The most important event of the past year for the cause of prison reform, was the holding of the Congress described in the preceding article. The interest awakened by this assembly was great at the time, and seems likely to be permanent; it has led to the formation of a national association for the reformation of penal discipline, of which the Rev. Dr. Wines has been invited to serve as secretary, giving up the post he has so long held as secretary of the New York Prison Association. It is probable that he will accept the proposition, and will also devote himself to preparing for an international congress on penal and reformatory discipline, to be held in 1872, at one of the European capitals. A resolution of Congress authorizing the President of the United States to appoint commissioners to represent the country in such an assembly, was passed early in March; and several of the State Legislatures have either passed or have now under consideration similar resolutions for the appointment of State commissioners.

In many of the States the question of reorganizing their very defective jail systems has been under discussion, and some laws have been passed looking in this direction. A thorough and well-digested bill for this purpose, introduced in the Maine Legislature in February last, met with favor, but was postponed till the next session. The author of the bill, and the report by which it was preceded, is Hon. Edwin B. Smith, Speaker of the House of Representatives, who will follow up the movement thus begun. In Massachusetts a bill was passed in June 1870, creating a Board of Prison Commissioners and an advisory board of women as inspectors of county prisons, with authority given to

the commissioners to classify the convicts in jails and houses of correction, and establish separate prisons for women. No practical result has yet followed the appointment of this commission, of which Rev. Joshua Coit is secretary, but the friends of prison reform have hopes that it will accomplish the desired object in due time. In New York, New Jersey, Ohio, Michigan, Illinois, and other States, measures of reform in regard to their minor prisons have been agitated, and in part carried into effect. Excellent convict prisons for persons guilty of minor offenses have been built at Cincinnati, Cleveland, Pittsburg, and other places, and the plan of making all establishments of this kind district prisons, like those at Albany and Detroit, is everywhere well received.

An amendment to the Constitution of New York, removing the control of the State prisons from partisan politics has found unexpected favor in the Legislature of that State, and it is believed the people will adopt it, whenever it can be submitted to their vote. The general condition of the State prisons throughout the country improves from year to year, except that most of them are now crowded with convicts. The subject of school instruction in all prisons is attracting attention everywhere, and some very successful schools have been opened. The Irish convict system makes converts constantly, and is now advocated by the leading prison reformers in most of the States, as appeared in the discussions at Cincinnati. It is worthy of mention that a board of prison inspectors composed entirely of women has been appointed during the past year in Rhode Island, and that the chaplain of the Kansas State prison is a woman, Mrs. Lydia Sexton. There are as yet, however, very few separate prisons for women in the United States.

The United States Census of 1870. — There was great hope, when the last number of the Journal was published, that the census law of the United States would be so amended as to give the able Superintendent, Gen. Francis A. Walker, the means of taking the best census ever yet made in a country so large as ours. There is no nation which has better material for a good census than ours, for, excepting the lately freed colored population of the Southern States, the only element among our people which affords trouble in an enumeration, is the newly arrived foreign portion. But these foreigners are the most enterprising, generally, of their respective nations, and far above the average of their countrymen in readiness to speak for themselves, and do for themselves: while not one native born American in a thousand, but is capable of answering all the inquiries of a census as intelligently as a professor. On the other hand, all European nations encounter such dense masses of ignorance, stupidity, and superstition in the course of enumeration, as detract very seriously from the value of the census.

But if the material for a census with us is good, no nation has such wretched machinery as this of ours, for taking a census.

The law of 1850, under which, with some few amendments, the Superintendent has been compelled to work, is antiquated, clumsy, and imperfect almost beyond belief. We shall presently state some of the practical difficulties developed in executing this law, and criticise it from its own point of view. But even if it were perfect in these respects, it would still be greatly defective, for its great fault is that it does not seek to do at all what is imperatively required in taking any good census. This defect might have been supplied by adopting the suggestions of the various experts called upon by General Garfield's committee two years ago, to propose alterations in the law of 1850; but a single senator in Congress, Mr. Conkling of New York, had apparently made up his mind that the law should not be improved, and such were his zeal and obstinacy that he prevented modifications which were absolutely needful. The defeat of Mr. Garfield's bill, which passed the House of Representatives, is wholly due to Senator Conkling, to whose skill in obstructing useful legislation the country owes most of the defects in the late census. But for this we might have had a single-day enumeration of the people, at least in all our cities and manufacturing towns, as is the practice in Great Britain, and without which accuracy cannot be secured. We might also have provided for the use of what is called the Prior Schedule, at least in all cities, manufacturing towns, and reasonably prosperous agricultural communities, as is now done in all European countries, except, possibly, Russia. This is absolutely essential to a satisfactory enumeration anywhere, for reasons which will suggest themselves to every mind, even if not familiar with the discussion of this special subject. These and other general modifications should have preceded any revision of the old law. Coming now to details, we find *first*, that the grand divisions of the country, as arranged for census purposes, are ridiculously disproportioned. Southern Florida, with its keys and reefs, affords large facilities for smuggling. It is, for the same reason, periodically strewn with wrecks. It has, therefore, a court of its own, and constitutes a judicial district, and is, therefore, a census grand division, with less than 6,000 inhabitants; while Northern New York, with two and a half millions, constitutes another subdivision for the same purposes. Northern Alabama, with 250,000 people, constitutes a judicial district, and so does Western Pennsylvania, with 1,750,000. Massachusetts is a District, so is Delaware; Indiana is a District, so is Idaho. It must be evident that if superintendence in this work is of any account, the superintendence provided for by the existing law must be of the least possible account.

Second. The officials having the largest responsibility and power in this work (the United States marshals) are selected for quite other considerations than would govern in the choice of officers appointed solely for the work of the census; and the odds are, therefore, heavy, that they will, in nine cases out of ten, be unfit for this duty. The census is an annoyance to the marshal, it generally involves a pecuniary loss, and he naturally

desires to make as little work as possible for himself in getting rid of it. By leaving the appointment of assistant marshals in the hands of the marshals, without even the formality of confirmation by the department, it is secured that at least two thirds of the immediate agents of the census shall be men utterly unfit for the work, the mere creatures of local politics, often grossly illiterate, and often practically disqualified by the worst of habits, or the worst of characters.

Third. Perhaps the greatest of all the defects, or false provisions of the law, is that which makes the marshals the absolute judges, without appeal, of the manner in which their districts shall be divided for the purposes of enumeration. More than one would suppose depends upon the judicious plotting-out of the territory to be canvassed. The experience of this census shows that, under the pressure of local or congressional political influence, five marshals out of six will constitute their subdivisions, as a rule, of a size utterly inconsistent with a prompt and thorough enumeration. As the work goes on, it will then become necessary to introduce new assistants, who have had no opportunity to study their duties in advance, and to carve out new subdivisions, not according to the reason of the case, but according to the necessities of the case. Last June the Census Bureau began with 4,500 assistants; it soon had 6,500 on its lists. Every addition to the force, made under these circumstances, involves a loss to the service. All the facts were fully brought to the attention of the marshals, but what do appeals in the interests of science avail against the dictation of local or general politics? It is difficult to convey an adequate idea of the ill results of this utter want of control by the Superintendent, of the most important single matter relating to his work.

Fourth. The next thing to be noted is the absence of all provision for a proper supervision of the work by means of special agents and inspectors, under the control of the central office. The Superintendent ought to have had a dozen or twenty men travelling all summer, finding out where the service was badly performed, overlooking the daily work of assistants, helping marshals through a pinch, correcting blunders before they had been repeated five hundred times, and reporting progress to the central office. The employment of such agents would have saved money to the government, and vastly improved the character of the service.

Fifth. The wretchedly insufficient pay, allowed by law to marshals and assistant marshals, and the still more wretched principle upon which that compensation is distributed, is the last point we shall name, though it is the first in order for criticism and correction. The compensation clauses of the act of 1850 affect much scientific nicety in making the pay of assistant marshals, under the varying conditions of city and country, in a measure uniform. The principle which is supposed to be compensatory, proves to be, in fact, the very reverse; and the result is that the

assistant marshals of the country, as a body, receive pay with the slightest possible respect to the amount of work done. The assistants at the Ninth Census will get from $1.50 a day all the way up to $20, without the smallest appreciable reason being shown *why* the man who gets $1.50 should not get $20, or why the man who gets $20, should get more than $1.50, provided anybody is to get so little. Of course the more government pays for work over and above what it is worth, the worse it will be done, as in the Collectorship of New York. And it is equally a matter of course that underpaid officials will generally do bad work. Of the inadequacy of compensation we need only say that the rates of payment were fixed twenty years ago. If not scandalously excessive then, they must be ridiculously inadequate now, and they have proved to be so in a majority of instances.

It was not possible, of course, to foresee all these defects and guard against them in a new census law, but many of them were sufficiently met by Mr. Garfield's bill, which Senator Conkling defeated. We hope that General Walker, when he has completed the work of the present census, will give the country the benefit of his experience, in the form of a project of a new law for 1880, which shall be introduced into Congress so long beforehand, and discussed so intelligently there and by the press and people of the country, that it will not be possible for a few obstructionists in either branch of the national legislature to defeat it. The chief difficulty a year ago was want of time in which to defend the measures necessary for a full and accurate census of our people. Such the enumeration of 1870 will not be, but it will come nearer to the perfect standard, by many degrees, both of completeness and exactness, than any previous census in the United States has done. And we are assured that the work of compiling its results, though necessarily greater than ever before, will be much more speedily accomplished than was done in the census of 1860, or that of 1850. Within two years from the beginning of the enumeration, General Walker hopes to have all his results published, — that is to say, by the summer of 1872. The preliminary volume is now in press, and will soon be issued.

Illinois Constitution. — This instrument, adopted in convention May 13, 1870, and ratified by the people July 2, 1870, contains much that may be pronounced of value to that department of Social Science which we call amendment of the laws.

Not the least valuable clause of the new Constitution is one which many affect to depreciate; but which we believe to embody the one cardinal virtue of human government. It is that part of the preamble which describes the people of Illinois as "grateful to Almighty God for the civil, political and religious liberty which He hath so long permitted us to enjoy, and looking to Him for a blessing upon our endeavors to secure and transmit the same unimpaired to succeeding generations."

To secure the purity of the legislature, on which the general welfare more immediately depends, its members are required to take the following oath:—

"I do solemnly swear (or affirm) that I will support the Constitution of the United States and the Constitution of the State of Illinois, and will faithfully discharge the duties of Senator (or Representative) according to the best of my ability; and that I have not, knowingly or intentionally, paid or contributed anything, or made any promise in the nature of a bribe, to directly or indirectly influence any vote at the election at which I was chosen to fill the said office, and have not accepted, nor will I accept or receive, directly or indirectly, any money or other valuable thing, from any corporation, company, or person, for any vote or influence I may give or withhold on any bill, resolution or appropriation, or for any other official act."

With regard to public moneys and appropriations, the General Assembly is prohibited from making any grant by private law. No debt is to be contracted exceeding in the aggregate two hundred and fifty thousand dollars; and moneys thus borrowed shall be applied to the purpose for which they were obtained, or to pay the debt thus created, and to no other purpose; and no other debt, except for the purpose of repelling invasion, suppressing insurrection, or defending the State in war (for payment of which the faith of the State shall be pledged), shall be contracted, unless the law authorizing the same shall, at a general election, have been submitted to the people, and have received a majority of the votes cast for members of the General Assembly at such election. It is also expressly provided that the State shall never pay, assume, or become responsible for the debts or liabilities of, or in any manner give, loan, or extend its credit to or in aid of any public or other corporation, association or individual. Nor shall any county, city, town, township, or other municipality, become subscriber to the capital stock of any railroad or private corporation, or make donation to, or loan its credit in aid of such corporation.

Special legislation is forbidden in a long list of enumerated cases, among which we find granting to any corporation, association, or individual the right to lay down railroad tracks, or amending existing charters for such purpose, or granting to any corporation, association, or individual any special or exclusive privilege, immunity or franchise whatever.

The article on corporations is full of important provisions. No corporation, to begin with, is to be created by special laws. In all elections for directors or managers of incorporated companies, every stockholder shall have the right to vote, in person or by proxy, for the number of shares of stock owned by him, for as many persons as there are directors or managers to be elected, or to cumulate said shares, and give one candidate as many votes as the number of directors, multiplied by the number of his shares of stock, shall equal, or to distribute them on the same

principle among as many candidates as he shall think fit; and such directors or managers shall not be elected in any other manner. Of this very significant enactment, we take an explanation from a local journal.

"At present, the majority of the stock elects the whole board of directors. This control is generally obtained by procuring by purchase, or otherwise, the proxies of a portion of the stockholders. In railway management the clique who control a road rarely own a quarter of the stock; but they manage to obtain the proxies of sufficient shares to cast a majority vote, and elect the whole board. There is no director on the board to represent the minority, who may own almost half of the stock, and thus the clique are left to their own devices. By the adoption of the section in question, the minority will always be able, by concentrating their votes, to elect as many directors as their proportion of shares would fairly entitle them to. Thus, if a company with a capital of $1,300,000 elects a board of thirteen directors, the minority, if they control $600,000 of the stock, can elect six of the thirteen directors. If they control but $100,000 they can still elect *one* director to look after their interests in the management of the affairs of the company. The selfishness, rapacity, and mismanagement of corporate bodies, and the secrecy, intrigue, and corruption in the proceedings of their officers, will receive a healthy and salutary check. All the stockholders will then be able to represent themselves by directors of their own selection, thus securing at all times full knowledge of the proceedings of the board and management of the funds they have invested."

The Constitution further provides that a majority of the directors of any railroad corporation now incorporated or hereafter to be incorporated by the laws of the State, shall be citizens and residents of the State.

Railways heretofore constructed or that may hereafter be constructed in the State are declared public highways, and shall be free to all persons for the transportation of their persons and property thereon, under such regulations as may be prescribed by law. And the General Assembly shall, from time to time, pass laws establishing reasonable maximum rates of charges for the transportation of passengers and freight on the different railroads in the State.

No railroad corporation shall issue any stock or bonds, except for money, labor, or property actually received and applied to the purposes for which such corporation was created; and all stock dividends, and other fictitious increase of the capital stock, or indebtedness of any such corporation, shall be void. The capital stock of no railroad corporation shall be increased for any purpose, except upon giving sixty days' public notice, in such manner as may be provided by law.

Besides securing minority representation for the benefit of stockholders, the Constitution secures it to some extent, for the benefit of citizens. In electing representatives to the General Assembly, a voter may cast as many votes for one candidate as there are representatives to be elected, or may distribute the same, or equal parts thereof, among the candidates, as he shall see fit, and the candidates highest in votes shall be declared elected. This mode of minority representation goes by the name of the Cumulative System.

Taken as a whole, this new Constitution shows a very encouraging advance in the principles of Social Science. It may not be more potent than other constitutions in overthrowing the corruptions of human society or human nature, but it makes a brave stand against many of them, and in this at least, deserves not only to be considered, but to be imitated in older States than Illinois.

Civil Service Reform. On the principle of receiving the smallest favors with gratitude, we suppose that we ought to be grateful to the President and Congress of the United States for some faint demonstrations in favor of reforming the Civil Service. The President's message at the beginning of the session declared that he would have the reform go beyond the mere fixing of the tenure of office, and govern the manner of making the appointments. As the session went on, several bills were brought forward, some to meet the President's wishes, others to make the reform even more effectual, notably by exempting those employed in the civil service from assessments to meet the expenses of their political parties. But the session drew near its close without seeing anything accomplished until a senator from Illinois suddenly succeeded in adding to an Appropriation Bill at the very last hour, a section authorizing the President to frame a system by which government offices shall be filled.

Here is the section in full: —

"*Be it further enacted*, That the President of the United States be and he is hereby authorized to prescribe such rules and regulations for the admission of persons into the civil service of the United States as will best promote the efficiency thereof, and ascertain the fitness of each candidate in respect to age, health, character, knowledge, and ability for the branch of service into which he seeks to enter; and for this purpose the President is authorized to employ suitable persons to conduct the enquiries, to prescribe their duties, and to establish regulations for the conduct of persons who may receive appointments in the civil service."

What will the President do? He said to Congress, "I call your attention to one abuse of long standing which I would like to see remedied by this Congress. It is a reform in the civil service of the country." And Congress has replied that he is authorized to prescribe such rules and regulations as may effect the reform. It seems as if he were bound morally if not legally, to use the power which Congress has placed in his hands.

But if he does, it will not be enough. What the country needs is not an executive, but a legislative measure, an act of Congress approved by the President, to become the law of the land. Congress must be roused to do something more than authorize the President; it must carefully consider, and then authoritatively pass an act, not merely to permit, but to order, such a course as will render the civil service an honor instead of a disgrace to the Republic.

II. Foreign.

Special Meeting of Council of the British Association for the Promotion of Social Science. On Tuesday, May 24, 1870, a special meeting of Council was held at the rooms of the Association in London, for the purpose of meeting Mr. Samuel Eliot, President of the American Social Science Association. Mr. G. W. Hastings, as Chairman of Council, presided. The circular calling the meeting directed attention to the importance of Mr. Eliot's object, — that of establishing mutual relations between the two associations. It pointed out that such relations would probably be of great value in various ways. They would enable each association to make use of the experience of the other on subjects of common interest. Each association would, in its own country, be able to collect and transmit information to the other on questions whereon its own experience had been varied or peculiar. The value of this information would probably be enhanced by the similarity of the institutions of the two countries. The social questions considered by the members of both associations were the same. Some of their members were also members of our association. The formation of an "International Code" was advocated in the pages of the "American Transactions," as well as in ours, by Mr. David Dudley Field. Another of our members (Professor Goldwin Smith) had contributed a paper on "University Education," while a third (Dr. Jarvis), well known as a corresponding member, was a contributor to the Health and Educational Departments. Lastly, the notice pointed out that in addition to the probable mutual advantages of the associations to each other, members of Council would probably see, in the establishment of friendly relations between the two associations, the formation of a tie binding one portion of the English public to a not uninfluential portion of the American. They would be prepared to give a welcome to Mr. Eliot as the representative of the kindred association of a kindred nation.

The following members of Council were present: Mr. T. B. Ll. Baker, Mr. George Campbell, Mr. Edwin Chadwick, C. B., Mr. Sergeant Cox, Right Hon. Sir Walter Crofton, C. B., Hon. George Denman, Q. C., M. P., Mr. Edgar, LL. D., Mr. H. W. Freeland, Hon. Dudley Fortescue, M. P., Dr. Neilson Hancock, Mr. Thomas Hare, Mr. Charles Hawkins, Mr. F. Hill, Mr. P. H. Holland, Lord Houghton, Mr. Thomas Hughes, Q. C., M. P., Mr. R. A. Macfie, M. P., Mr. James Marshall, Mr. McClelland, Mr. W. H. Michael, Mr. H. N. Mozley, Right Hon. Sir Joseph Napier, Bart., Mr. Edwin Pears, Dr. Pitman, Mr. Safford, Mr John Westlake.

The Chairman said that this special meeting of Council had been held for the purpose of welcoming Mr. Samuel Eliot, the President of the American Social Science Association, and of assuring to him, and through him to the Society which he represented, the cordial coöperation of their

own body. He (the Chairman) was only expressing the feelings of the whole Council when he tendered to Mr. Eliot their best wishes for the success of a sister association. If England had had the merit of originating societies for gathering into a whole the various branches of moral and political science, it was with genuine satisfaction that they had witnessed the origin of similar institutions in other parts of the world. More than one Social Science Association existed on the continent of Europe, and with each they had, from the outset, maintained cordial relations. But it was not in the nature of things that the mutual interchange of advantages between a continental and an English association could be so great as it must be between Americans and themselves; Americans and Englishmen spoke the same language, enjoyed a common literature, and had in the main the same political institutions, the same laws, the same social customs. It was manifest that the Social Science Associations, existing in two such nations, could be of immense service to each other, in the exchange of information and counsel. It was probable that there were subjects on which each could instruct the other. He would mention one in respect to which America was far ahead of England, — that of national elementary education. Throughout the United States the system of common schools had carried intelligence and order to the homes of the whole population. He remembered when at the Paris Exposition in 1867, examining a model of these schools, and receiving from the courtesy of the gentleman who had charge of it, much valuable statistical information as to elementary education in America. Nothing in the world was more remarkable than the rapidity with which these schools followed the wave of population, springing up in the newly-planted wilderness, and ensuring to the humblest citizen the means of education for his children. He did not doubt that American nationality owed much to these common schools. An American who attended the Belfast Congress in 1867, and took a part there in the discussions of their Education Department, compared the common-school system of his country to a great grinding-mill, into which the new immigration inevitably went, and pointed out that whatever language, German, Norwegian, Dutch, or what not, they spoke in going in, they came out an English-speaking people. It had been a calamity to England, but one which they trusted would soon be removed, that no such system had been established here. Turning to another question, he thought that America in her turn might learn something of England on the subject of economics. Here the delusion of protective duties had been thoroughly dispelled, and they were reaping the advantages of free trade in a constant increase of commerce and production. It appeared that the bulk of the American people still entertained the curious fallacy that a nation could grow rich by paying dearer for what it wanted. He ventured to commend the question to their sister association, confident that it could confer no greater benefit on the United States than by the dissemination of sound knowledge on political economy. Then, again,

there was a subject on which they could exchange information with mutual benefit, that of prison discipline. The Crofton system, fully established and entirely successful in Ireland, and to a great extent now adopted in England, was an institution which they need not be ashamed to show beside that of any country in the world. But he did not doubt that in the prisons of the United States valuable examples might be found, especially as to the introduction of productive labor into jails. These were only samples of the many topics on which, if time permitted, he might enlarge; but he now commended Mr. Eliot to their kindness, and would conclude by expressing his hope that the Social Science Associations of America and England might work together in true friendship for the promotion of that science, which, when duly cultivated, would put an end to empiricism in statesmanship and legislation, and establish the great principle, that the laws which guide the progress of society are as worthy of observation, and as capable of ascertainment, as those which regulate the development of material nature.

Mr. Eliot, after thanking the Chairman and gentlemen of the Council, for their kind reception, said that he did not feel as if he were speaking to strangers, for he was not only among Englishmen, but among Englishmen interested in the same questions of science and humanity. The Association which he represented was, in a certain sense, the daughter of the English Association, for though it might have been founded had the latter never been, its foundations were laid all the more easily and the more securely, in consequence of the model that existed here. It presented itself in the attitude of a learner, and sought for all the opportunities of instruction and support to be found in intercourse with the parent institution. The Chairman had spoken of various topics in which the two associations might interest themselves to their mutual advantage. Many of these had been before the American Association, and the action of that body in relation to them had not been fruitless. As an illustration of the service which the British Association might render the American, Mr. Eliot mentioned an "Immigrant's Handbook," now in preparation by the latter, to which the former could evidently contribute much useful information respecting the emigrants from Great Britain, and their wants as they left their old homes in search of new. In illustration of the service which the American Association was capable of rendering the British, Mr. Eliot adduced the testimony which he had just been invited to give to the Sanitary Commission respecting Public Health in the United States, a subject on which his Association, or the proper departments, were much more competent to speak than he. He then went on to sketch the work of the American Association in Education, Health, Economy, and Jurisprudence, confessing all that was imperfect in each branch, and yet maintaining that a good deal had been done in each, Economy, perhaps, excepted; while even in that the clouds were daily lifting, and errors daily disappearing. He dwelt at length upon the

desire of the American Association to contribute toward the growth of higher education in the United States, and acknowledged the greater progress that had been made in this respect throughout the old world, particularly in Germany. He also touched upon the want of æsthetic education among his countrymen, and described some efforts of the American Association in this direction. But the great object for which he would exert himself to-day was the formation of such close and cordial ties between the two associations as would open a new epoch in the history of both, and lead to more active and successful exertions in behalf of all that was wise, generous, and humane in civilization. Mr. Eliot concluded by expressing the great pleasure which this meeting with the Council had given him, and thanked the members for their presence and for the patience with which they had listened to him.

The Right Hon. Sir Joseph Napier had much pleasure in proposing the resolution which he was about to submit. He had listened with deep interest to the able, instructive, and modest address of Mr. Eliot. As a member of an association, kindred to this in its objects and attempting to carry out its objects by similar means, he welcomed him to England and to that Council. As president of that Association, he on behalf of this Association afforded him the heartiest welcome. He believed that the two associations might be of very great use to each other, and on that account, if for no other, he was glad to see him there. As a native of that country "whose back was turned to England and face to the West" he especially was glad to be present. The two associations might each be of very great use to each other, and speaking for the one to which he belonged, he could only say that they would be happy to afford every information and every assistance to the American Association which they could possibly do. He proposed, —

"That this Council has great pleasure in giving a cordial welcome to Mr. Eliot, President of the American Social Science Association, and expresses through him to the Association which he represents, its earnest desire for mutual coöperation."

Mr. Edwin Chadwick, in seconding the resolution, said he could assure those members who might not have read the "Transactions" of our sister institution, that they are increasing in ability, in force, and in international interest. Referring to those topics to which he had paid special interest, and on which we may appear to have an exclusive lead, he stated, that although we may have much to give, yet there is an increasing amount of matter, of varied and important experience, and original suggestion to receive. It had greatly concerned him to observe our people going out from the old country, and carrying with them old habits old errors; and in the foundation of new villages and towns, from want of sanitary knowledge, planting old evils, and making their days short in the new land that was given them. And yet, from the United States, he was enabled to cite very important experience from New York and Phil-

adelphia of a system of constant water supply, which we have yet to make prevalent in the metropolis and in a number of our old urban districts, as the foundation of a complete system of house and town drainage. In the detail of works we may derive much from American ingenuity and skill, and from American hygienists very important observations of the generation and course of epidemics. In education, whatsoever we may have to give (and we may have to give them much warning of the waste of time in fruitless classical studies, and inferior outcomes in superior education), we have much to receive from them, in their perception and application of the principle of simultaneous class-teaching, or of graded schools, the working of which in superior efficiency and economy had been well described. On the other hand, we have given the half-time principle of mixed industrial and physical training, and now, as part of it, the transference of military training, from the productive adult stages to the non-productive and infantile school stages of life, on the same half-time principle of physical and mental exercises, and imparting bodily aptitudes for civil work, and letting earning and learning go on as early and as closely as may be together. It was an advantage of this Association, and of its discussions, that it is of a neutral character, and that they are to the greatest extent free from the taint of political party views. As a neutral body we had discussed such questions as the methods of vote-taking, including the ballot. He, for one, thought we might have derived much advantage if we had been enabled to obtain information from a neutral body, as he presumed the sister Association in the United States was, and one more trustworthy than the average of men who figure on political platforms. On the other hand, he believed we might commend to the attention and consideration of our brethren of the sister Association the principle of open competitive examinations as tests of qualification for, at all events, junior or first appointments to the public service. Notwithstanding all that was said on political platforms, they might be assured that the principle was working well, and sooner or later would be made general. He might extend the indications of the mutual advantages derivable from intercommunication with the social scientists in America. He hoped individual inquirers might be led to come and go, with the assurances of mutual aid in their researches.

Lord Houghton said he could not but feel pleasure in being present to welcome Mr. Eliot. He did so very sincerely, and regretted that his stay in England was so short that he would not have time to make the acquaintance of many members of the Association. He welcomed him as one engaged in similar studies, but especially as an American so engaged. The truth was that the Americans were so entirely one with us in sympathy that he had never been able to regard them as foreigners. In presence of his old friend (Sir Joseph Napier) he did not hesitate to say that Americans were more in harmony with us than Irishmen. Americans had to study many of the questions of economic science under

different conditions from those in which they were presented to us. Many of our evils arose from our want of space. Now in America, whatever they wanted, they had space. Still there was a large common stock of subjects in which the two associations might well be of use to each other.

The Hon. George Denman, Q. C., M. P., pointed out various ways in which one association might assist the other. He called attention to the fact that when Englishmen wanted to see certain of their legal questions treated in a scientific manner, they turned to such American writers as Kent and Story.

The resolution was then put and carried by acclamation, after which the Council adjourned. [From Sessional Proceedings of the National Association.]

Annual Meeting of the National Association for the Promotion of Social Science. — The fourteenth annual meeting of this Association was held at Newcastle-upon-Tyne, from September 21 to September 28, 1870, and as usual attracted "ordinary members" from all parts of the United Kingdom, besides large numbers of "associate members" from the immediate neighborhood. The latter, on payment of ten shillings, have the privileges of attendance, and a vote at the annual meeting, but do not receive a copy of the "Transactions." The Council, which is the governing body of the Association, and consists of those who have held office, members of Parliament belonging to the Association, and others, met on the first day for business, and for the approval of the arrangements for the meeting, which had been in the hands of a local executive committee.

After Divine Service, the proceedings of the Association were opened by an address by the Duke of Northumberland, President of the Association, reviewing in rather gloomy terms the various educational and social reforms of the past year. It strikes us, on our side the water, as a singular mistake to select such a man, even though a duke, to preside over such a gathering.

The Association is organized into four departments, namely, Jurisprudence, Education, Health, Economy and Trade; each of which has its own president and secretaries, and holds separate meetings for the reading of papers and discussions in its peculiar province. The papers are of two kinds, those which are requested on special topics, and those which are voluntary; the Council reserving the right of rejecting any voluntary paper sent in, or if allowing it to be read, of publishing or not publishing it, as may seem best. The Department of Jurisprudence is subdivided into three sections: section A, International Law; B, Municipal Law; C, Repression of Crime. The Department of Economy and Trade is subdivided into two sections.

The President of the Council, and the president of each department, delivered addresses before all the members in the Town Hall on five suc-

cessive days, after which the departments adjourned to their respective halls.

The addresses and papers before the different departments were as follows:

I. Jurisprudence.

Opening Address. Lord Neaves.

Section A. International Law.

General Considerations on the Nature of International Law. Mr. Hodgkin.

Defective State of International Law. Professor Leone Levi.

Colonies as Fields for Experiment in Government. Mr. Edward Wilson.

Is it desirable to prohibit the export of Contraband of War? Mr. Westlake, Dr. Waddilove, and Mr. S. S. Dickinson, M. P.

International Arbitration. Mr. Thomas Beggs.

Colonial and Imperial Policy. Mr. MacFie.

On the Economical Results of War in the Extent and Cost of International Armament, and in the injury to Productive Industry. Professor Leone Levi.

National Defenses. Mr. R. Dudley Baxter.

Prevention of Wars in Europe. Mr. R. S. Bartleet.

A Parliament of Nations and International Arbitration, by Señor Don Arturo de Marcoartu.

Section B. Municipal Law.

Ought Railway Companies to be liable for the Acts of their Servants? and, Is it desirable to impose any Check on Fraudulent Claims? Mr. Joseph Brown, Q. C., and Mr. T. Y. Strachan.

Is it desirable to establish Tribunals of Commerce, and if so with what Powers? Mr. W. J. S. Daniel, Q. C.

Suggestions for an Extension of the Power of County Courts. Mr. W. S. Taglish.

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What is the best Method of disposing of Sewage and Excreta? Mr. Jas. T. Blackburn.

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Legislation to prevent Adulteration of Food and Drink. Mr. Phillips Bevan.

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Water Supply of the District. Mr. P. W. Meik.

The Sewage Question of South Shields. Mr. Thomas Hudson.

Quality of the Water Supply of Newcastle-upon-Tyne. Mr. John Pattinson.

Sanitary Condition of Newcastle. Alderman J. L. Bell.

Chemical Climatology. Mr. P. H. Holland.

Legislative Means of avoiding Chemical Fumes and Smoke. Mr L. Armstrong.

Sanitary Works of Sunderland. Mr. Crozier.

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How far is it desirable and practicable to establish Courts of Arbitration and Conciliation between Employers and Employed? Mr. John Jones, and Mr. Wm. Owen.

Present Aspect of the Workingmen's Club Movement. Rev. H. Solly.

Organization of Societies for Good Work. Mr. R. Bailey Walker.

Supervision of Pauper Children when boarded out. Mr. W. d'Estene Parker.

How far is it desirable and practicable to extend Partnerships of Industry? Mr. A. O. Groening.

The Coöperative Movement in the North. Mr. James M'Kendrick.

Pauperism; its Diagnosis and Treatment. Mr. Charles Lamport.

The Province of Local Option in respect to the Sale of Intoxicating Liquors. Rev. Dawson Burns.

The Liquor Traffic. Mr. Wm. Levett.

The Sunday Closing Question. Rev. E. Howlett.

In connection with the General Congress, a Ladies' Conference was held under the presidency of Lady Bowring, at which papers were read and discussions held on subjects more nearly pertaining to women than those of the general meeting.

University Examinations for Women. Miss Isabella Tod.

The Education of Girls. Miss Porter.

Married Women's Property Act. Miss Wostenholme.

Righteous Baby Farming. Mrs. Meredith.

The Use Women would probably make of the Franchise. Miss Jessie Boucheret.

Formation of a Disqualified-for-liberty Class of Criminal Female Offenders. Mrs. Meredith.

Special Training for Women. Miss Emily Faithfull.

Women as Inspectors of Schools. Miss Newsome.

Training of Domestic Servants. Mrs. M. A. Baines.

Workingmen's meetings were also held during the session of the Congress.

The general interest in the Association and the Newcastle Meeting is shown by the fact that a subscription in aid of its expenses, partly from individuals and partly from corporations (that of Newcastle among them), amounted to over twelve hundred pounds.

A Newcastle paper remarks upon the wise custom of the committee in planning out the greater part of the time at the disposal of each annual Congress in such a way that a definite proportion of the questions most urgently pressing on public attention at the time, is pretty sure to receive the fullest consideration. No one can usefully contribute to the discussion of every question, and therefore no waste of power is involved

in the classification of business into sections. Most men affect one, or at most two or three, specialties, and within these limits their judgment is to be valued; while for those who may be accounted learners rather than teachers, it is an obvious advantage that they should have their minds deeply engaged on a few matters rather than superficially excited by a greater number than they can master. Accordingly, the Social Science Committee so order their campaign that every earnest philanthropist may find a niche for himself or herself, and a task to teach or a task to learn, which may be well taught and thoroughly learned. Persons of abnormally large sympathies may contrive to take part in several discussions, but the temptation to overdo this questionable activity is considerably restricted by the difficulty of being in two places at once.

The credit of having founded the British Association is due to Mr. G. W. Hastings. This gentleman was for several years its indefatigable general Secretary and is now Chairman of Council. When, however, in 1856, it was suggested by Mr. Hastings to Lord Brougham that he should take the lead in founding such an association, he readily acquiesced. The object of the Society was declared to be, "to afford to all those persons who are engaged in the various efforts for the improvement of the people, an opportunity of considering social economics as a great whole." Sir Charles Lyell has pointed out that no one can be a good geologist unless he knows something also of chemistry, of comparative anatomy, of botany, and of a number of other kindred sciences. So too it was felt that those who were considering social subjects were in some danger of looking too closely to the immediate objects which they had in view without regarding what others were doing.

Anglo-American Association. Such is the title of an organization recently effected in London, from which the following address has been received.

The Anglo-American Association has been formed for the purpose of obtaining the best securities for the maintenance of a friendly understanding, and for the cultivation of more cordial relations, between the United States and Great Britain. It is proposed to establish a similar Society in the United States and in Canada, and it has been ascertained that there are many leading Americans who will give their aid to this end. It is hoped that citizens of each country resident in the other will join the Association in the place of their temporary domicile.

The necessity for the establishment of some such Society has forced itself on several of the promoters of the Committee, who have been lately in the United States. The lamentable ignorance of contemporary American history, which exists in England even amongst otherwise well-instructed politicians, is too notorious; and the case is much the same in the United States with reference to Great Britain. Upon all questions in controversy between the two countries, the facts and arguments which form the strength of the case on each side are for all practical purposes unknown in the other. It is fruitless to inquire how

this came to pass; it is clear that it is dangerous to allow such a state of things to continue. Hence the present effort, which the promoters are confident may be made the instrument of spreading sounder views, and of bringing together citizens of each country outside of the range of party politics.

The work of the English Association for the present will be confined to the publication of carefully prepared statements upon the questions at issue, which are specified in the President's Message, and to entering into correspondence with citizens of the United States who may be ready to join in the work of hearty reconciliation between the two countries.

It is believed that other methods of forwarding this general object will open out, of which the Association will be able to avail themselves in due course.

Citizens of either country, who may be ready to join in this effort, are requested to communicate with the Hon. Secretary, 1, Adam Street, Adelphi, London, W. C.

The Association has also published a Report on the Questions between Great Britain and the United States with respect to the North American Fisheries.

These documents, with an invitation to coöperate in the work of the Association, have been received at the office of the American Social Science Association, from whose members there cannot but be a kindly response to the English Association.

Civil Service Reform in Great Britain. While the government of the United States contents itself with professions of reforming the Civil Service, that of Great Britain pursues the active measures begun near twenty years ago.

In April 1869, Mr. Gladstone, while opposing as premature a motion to make all appointments to the civil and diplomatic service obtainable by competitive examination, said that as the government wished rather to rely upon what they performed, than upon what they promised, they therefore asked a reasonable time to consider how far they might be disposed to open the public offices to general competition. The only departments open when Mr. Gladstone made this statement were the Post Office, the India Civil Service, and a few of less importance. For others, candidates were nominated as before by those holding the patronage of the department, and were then examined by the Civil Service Commission, established in 1855. Examinations before the commissioners in relation to such appointments were not of course obligatory upon the candidates, unless the authorities by whom they were appointed desired them to be examined, as they generally have done of late years.

Within a little more than a year from the time Mr. Gladstone spoke, as has been mentioned, the appointments to all the civil departments were thrown open to free competition, by an Order of Council dated June 4, 1870. The Foreign Service was not touched, nor any office to which the holder is appointed directly by the Crown, nor any situation filled in the customary course of promotion. But for any vacancy in

any department, from the Treasury office to the Registrar of Petty Sessions Clerk's office, any one of the six million adults in Great Britain may now offer himself as a candidate, and be confident of success if he deserves it. The rules by which he is examined and if successful appointed are of general application, framed by the commissioners of Civil Service acting in concert with the chief of each department, and requiring the approval of the Commissioners of the Treasury.

Besides passing an examination on appropriate subjects, every candidate must satisfy the commissioners that he is within the limits of age prescribed for the office, that he is free from any physical defect or disease which would interfere with the proper performance of his duties, and that he has a good moral character.

All this being complied with, and if successfully, the appointment being obtained, the person appointed is required to pass six months of probation in the duties of the office, before receiving his final certificate. During this time his general intelligence, efficiency, and other qualities beyond the tests of any examination, will be brought under the immediate notice of the chief of the department, with whom the power to dismiss for good cause, is left undisturbed.

In all cases, the commissioners are authorized to make an appointment on evidence satisfactory to them without an examination; and we presume that the probation may be dispensed with or made merely nominal, as they or the chiefs of department may see fit. The liberty thus allowed the appointing powers does away with one of the serious objections, once and perhaps still brought against the examining system, namely, that it might keep out of office the very men most fit to be in it, for the reason that they would not present themselves for examination.

Other objections are made against the system. One is, that it prevents real efficient merit from succeeding in competition with cramming or audacity. Another is, that the examinations are wide of the mark, and no matter how triumphantly a man passes them, he may be wholly unfit for the prize he wins. Neither of these objections is without foundation. Yet it seems easy to reply to the first, — that no examinations can make up for the deficiencies or humble the pretensions of human nature, to which, rather than to the examinations themselves, the objection ought to attach. To the second, it is enough to answer that probation, the necessary complement of the system, will decide what the examination has failed to do.

Objections or no objections, the system has won such confidence in Great Britain that it is now proposed to extend it from the civil to the military service, and throw open the hitherto exclusive commissions in the army to competitive examination.

London Police Examinations, as described in a recent number of the Quarterly Review, are worthy of being commended to the atten-

tion of our municipal authorities. Every possible care, we are told, is taken to select the best men.

Before the candidate is admitted to examination, the following preliminary conditions are requisite: He must be under thirty years of age, and, if married, not have more than two children dependent upon him for support; he must stand at least 5 feet 7 inches (recently, 8 inches) in height, be free from bodily complaint, and of strong constitution; he must be intelligent, able to read and write, and, above all, he must be able to give proofs of an unimpeachable character for honesty, industry, sobriety, and good temper. And if, after being examined, he shows the requisite amount of intelligent comprehension of the rules and regulations of the service, and gives evidence of his ability to act with discretion and judgment in a variety of problematical cases that are laid before him, this first-class man — for such he must really be to fulfill these various conditions — is taken on at 19*s.* a week, having first undergone instruction in the rudiments of company drill for a fortnight.

Nineteen shillings with a chance of rising by good conduct to 21*s.*, 23*s.*, and 25*s.* weekly, is not a very tempting salary; yet there is no want of candidates to fill vacancies in the force. In 1869 the number of applicants for admission to the metropolitan police was 4,550; of whom 2,470 were not examined, as not coming within the stipulated conditions of age, stature, health, education, etc; 1,750 were rejected as unqualified on account of insufficiency of testimonials; 720 did not proceed with their applications, and 2,080 were selected for examination, of whom 940 were rejected, and 1,140 passed; or only about 25 per cent. of the original number of applicants. Of the men who passed their final examinations, 939 were eventually sworn in as police constables.

There is one advantage on entering the service: a man knows that promotion is entirely by merit, and that he is commanded by gentlemen who will be quick to recognize his good qualities; so that he may hope by activity, sobriety, and intelligence in the performance of his duties, to rise to superior stations in the force.

London Improved Industrial Dwelling Company. Some account of this happy blending of a good investment with a good work was given in the first number of our journal. The distinction between it and merely philanthropic provisions for the industrial classes was then pointed out to be mainly this, — that the houses which are built and leased on business principles may be multiplied to almost any extent, while those put up from motives of benevolence alone must be limited to a small proportion of the people in want of them.

We recur to the subject in order to profit by an account of the company drawn up by Dr. H. I. Bowditch, Chairman of the Massachusetts Board of Health, and contained in the recent report of that body. As he states, "a thorough insight into the operations of this company is all

important for all who desire to know how to erect good homes for the people." Sir Sydney Waterlow, Alderman of London, and the head of a large printing establishment, was joined by a few others in organizing the Improved Industrial Dwelling Company in 1863. The idea of the enterprise appears to have originated not with Sir Sydney, but with a practical mason, Mr. Allen, who having been and being a workingman himself, knew how much workingmen stood in need of what he called "good, healthy, and tasteful homes." From this beginning the company has gone on during seven years, until its estates have grown to the amount described in the "Fourteenth Half Yearly Report, June, 1870."

	Tenements.				
	3 Rooms.	2 Rooms.	1 Room.	Shop.	Total.
Cobden Buildings, King's Cross Road	8	10	–	2	20
Nelson Buildings, Bridge Street, Greenwich	20	20	–	–	40
Tower Buildings, Brew House Lane, High Street, Wapping	30	30	–	–	60
Stanley Buildings, Old Saint Pancras Road, King's Cross	51	50	–	3	104
Palmerston Buildings, City Garden Row, City Road	36	36	–	–	72
Cromwell Buildings, Red Cross Street, Southwark	10	12	–	2	24
Derby Buildings, Britannia Street and Wicklow Street, King's Cross Road	40	118	–	10	168
Gladstone Buildings, Willow Street, Finsbury	84	84	–	–	168
Waterlow Buildings, Bethnal Green Estate	31	48	3	–	72
Total completed	300	408	3	17	718
Buildings in course of erection at Ebury Street	50	60	–	10	120
Buildings in course of erection at Ebury Square	40	25	–	4	69
Buildings in course of erection at Bethnal Green	40	139	–	–	190
Total either erected or being erected	430	623	3	31	1,087

The main features of the company's buildings, as distinguished from other buildings of similar purpose, are first, that each family shall have its own home, with necessary conveniences complete; second, parents shall

have their own chamber, and children shall be separated according to sex; and third, each room shall communicate with the open air. These arrangements require the payment of a higher rent, and therefore the poorest of the laboring classes cannot be said to be provided for. But in a building now going up, and just finished, some cheaper quarters are to be furnished.

The following table shows the rents paid in four of the company's buildings.

BUILDINGS.	Four Rooms, Kitchen, etc.	Three Rooms, Kitchen, etc.	Two Rooms, Kitchen, etc.	One Room, Kitchen, etc.	No. of Families.
Derby .	–	7s. 6d.; at top, 5s.9d.	7s.3d.; at top, 5s.9d.	–	168
Cobden .	–	7s.; 4th story, 6s. 6d.	5s.6d.; 4th story, 5s.	–	–
Stanley .	–	7s.; at top, 5s. 6d.	6s. 6d.; at top, 5s.[1]	–	101
Allen .	9s.		5s. 6d.; 6s. 6d.	4s.	70

The last named building, the Allen, is thus described by Dr. Bowditch:

"It is the latest tenement erected by Mr. Allen, and was opened in September, 1870. The building is of brick with stone finishing. It is five stories high. The rooms are eight and a half feet high from floor to ceiling. The front is about one hundred feet on the street. Its depth is a little over forty feet. The central part of the front line is set back a short distance, and has four bay windows on each story. The two end portions present, therefore, the appearance of wings added on each side of an elaborately constructed centre. The structure has a certain degree of elegance and refinement about its exterior, which would make it not inappropriate for any of the fashionable streets of the metropolis. Yet it is filled wholly with a series of small tenements, very convenient and perfectly lighted and ventilated, the homes of some of the humblest of the people of London. These homes are constantly occupied. The site of the building is directly opposite a wretched, low tenement house analogous to the 'Crystal Palace' in Lincoln Street, Boston. Mr. Allen feels sure, from his previous experience of the influence of the Waterlow Buildings, that the silent example of his house will tend to elevate the character of its opposite neighbor."

As to the profits of the company, the reports exhibit the most satisfactory results. The capital is £250,000, of which about £100,000 is paid in. Additional money has been borrowed at four per cent. of the government and repaid, at least in part, from the annual receipts. Mr. Allen told Dr. Bowditch that "the company never makes less than twelve per

[1] With two bed closets.

cent." Sir Sydney Waterlow considers the company to be equally successful "as a sanitary measure and as an investment for capital."

Blue Book for the People. Such is the name applied to one of the parliamentary volumes of the last year, containing "Reports of Her Majesty's Diplomatic and Consular Agents Abroad respecting the condition of the Industrial Classes in Foreign Countries." The Reports are twenty in number, namely, from Austria, Baden, Belgium, Brazil, Denmark, France, Greece, the Hanse Towns, Netherlands, Peru, Portugal, Prussia, Russia, Saxony, Spain, Sweden, Switzerland, Turkey (including reports from Constantinople, Monastir, Salonica, Broussa, Aleppo, Beyrout, and Smyrna), the United States, and Würtemberg. As far as we can judge, the chief value of these observations to the British or any other workman, and if to the workman, also to the employer, — is in enabling him to see how the laws of labor operate under circumstances in which he has no personal interest, and of which he can therefore form a judgment that may not be without effect upon his opinions concerning his own relations. Whether the "international facts" as they are termed, will restore harmony to the much disordered world of labor, here or anywhere, may be doubted. The congresses in which the workingmen have gathered from various states in Europe have rather heightened than dispelled the antagonism between the laboring and other classes. But a book to be read in quiet will give more light on disputed questions than a hundred debates conducted amid great agitation if not great disorder, and the time comes when facts produce an impression, and constant dropping wears the hardest stone. By all means, therefore, let us welcome Blue Books for the People, and express our respect for governments which seek to enlighten rather than to quarrel with classes that give them trouble.

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